Supervisory Management

DECEMBER 1957

THE SUPERVISOR AND THE CLIQUE

There are ways to get through to the "in-group."

NEW SKILLS FOR OLD

Help wanted: more workers, trained for tomorrow's technology.

WHY WORKERS QUIT

Most employees would rather stay on the job. Here's how the supervisor can help them.

AMERICAN MANAGEMENT ASSOCIATION

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TUE	WED	THUR	FRI	FRI	SAT	SUN	RECOVERY
2	3	4	~~5~~	~~6~~	7	8	DO NOT DISTURB
9	10	11	~~12~~	~~13~~	15	16	
17	18	19	~~20~~	~~21~~	22	23	
24	25	26	~~27~~	~~28~~	29	30	

No other calendar can make these claims!

1. Constructed of pure Latex rubber, can be stretched or shrunk in any direction.
2. No 1st of the month—no bills to pay. ♦ ♦ ♦ ♦ ♦ ♦ ♦
3. No Mondays. This eliminates Monday blues, Monday accidents, Monday absenteeism. Inspectors, engineers, quality-control men, and cost accountants come around on Monday only—when the supervisor isn't there.
4. Two Fridays provide ample time to meet end-of-week deadlines. (This means two paydays, but who cares?)
5. Also, all holidays fall on Friday. ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦
6. Tuesday through Friday are short days. To compensate for this, Saturday and Sunday are 36 hours each (but can be shrunk for visits to in-laws).
7. RECOVERY DAY, after Sunday, provides a chance to recuperate from the weekend. This is also the day for catching up on forgotten remembrances like birthdays and anniversaries. RECOVERY DAY is undated. By writing in his own date, the supervisor insures that his gift will arrive on time.

VOL. 2 NO. 13* DECEMBER 1957

Supervisory Management

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SUPERVISORY MANAGEMENT, December, 1957, Volume 2, Number 13. Published monthly by the American Management Association, Inc. Publication Offices, 10 Ferry Street, Concord, N. H. Editorial and Business Offices, 1515 Broadway, New York 36, N. Y.

Address all correspondence to SUPERVISORY MANAGEMENT, *American Management Association, Inc., 1515 Broadway, New York 36, N. Y.*

Subscriptions: $7.50 per year (AMA members $6.50); bulk rates available. Single copies $1.00 (AMA members $.75). Second-class mail privileges authorized at the Post Office at Concord, N. H. The Association does not stand sponsor for views expressed by the authors in articles issued in or as its publications. Copyright © 1957 by American Management Association, Inc.

* Note to Librarians: This issue has been made part of Volume 2 in order to begin the new volume in January.

Printed in U.S.A.

THE SUPERVISOR AND THE CLIQUE

By George S. Odiorne
Manager, AMA Personnel Division

The first step in working with a clique is to recognize that it exists.

CLIQUES ARE a fact of life for the supervisor. He doesn't need a social psychologist to tell him that every work group has informal as well as formal organization, and that this informal organization exerts a powerful influence over the work he is trying to plan. Let's look briefly at what some experienced observers have reported and tie it in with the findings of social-science students. Between the two we might find some practical hints.

What is the clique?

The clique is a phenomenon common to all human organizations, and every clique has something in common with every other one. At the same time cliques in business and industry do exhibit some special traits.

1. The clique is an informal association of people who are united by a nonlogical, sentimental or emotional tie. It is not formed in an orderly fashion for logical purposes, and cannot be made to evaporate by management decree.

2. There are a number of ties that can cement the clique. These include common job titles, common workplaces, common forms of work, common racial origins, common seniority, and like sentiments and interests in school attended, sex, age, shared discomforts, shared pleasures, shared oppression, or shared victories. It may be as casual as a common hiring date, or as complex as a blood tie.

3. Cliques have no geographical bounds, and often are not bound by titles or occupational levels. The duck-hunting crowd may include a vice-president and a machinist; the members of the bowling team, the welders in the maintenance shop and a few men in research and development.

4. A single person may belong to several cliques, and be loyal to each in his own way, even though the cliques are in some ways antagonistic toward one another.

6. The clique has an existence and life of its own, apart from the lives of the individuals who make it up.

7. Cliques tend to cluster around physical objects such as work uniforms, desks, telephones, and carpets; and these objects have a dual role. First, they serve a useful purpose in the company. Second, for the cliques they become symbols of status and of social relations, so that, for example, if one crew gets new tools and the other one doesn't, this becomes a subject of attention and speculation for the clique.

The clique controls its members

For the manager, the outstanding characteristic of the clique is the control it exerts over the behavior of its members. The clique's control methods are often more effective than the powers of discipline with which management arms supervisors; when in direct conflict with authority, the clique almost always wins. Here's how the clique exerts control:

1. *It develops its own informal leaders.* When managers seem out of sympathy with the clique, or when they appear to threaten either the clique as a whole or its members, they may rally around an informal leader who promises protection or who leads them in resistance. Under ideal conditions, when employees are convinced that the foreman is acting in their interests, he may become their informal as well as their formal leader.

2. *It develops its own communication system.* This system, known as the grapevine, is a powerful weapon which can be used both for and against management. Under favorable circumstances, the grapevine carries stories of managerial

intelligence and insight. "He's a fabulous man," and "that guy is a sort of genius," says the clique about its heroes. When the clique opposes goldbricking, the goldbricker is almost inevitably left defenseless. But, if the clique opposes a supervisor, the grapevine circulates antagonistic stories, not even a hint of which reaches the ears of the threatening figure. The purpose of this communications system is not so much accuracy as speed—and above all the protection of the group. As in all armed camps good news about "our side" and bad news about "them" is most avidly sought. The clique often has its own private language, sometimes unintelligible to outsiders.

3. *It can eject offenders.* The clique can ostracize a member who violates its rules. For example, the machine operator who consistently exceeds the output rate set by the group and refuses to follow group suggestions that he "take it easy" will not be invited to take part in the small talk and social life of the group.

4. *It can punish offenders.* This punishment can be refusal to help the offender when he falls behind or is having trouble, failure to keep him posted on shop developments, exclusion from outside activities, gossip, ridicule, and in extreme cases, sabotage of his tools or workplace.

The clique often exerts its controls in favor of company goals and progress. The clique can put on pressure to prevent absenteeism, punish low producers, ban poor quality, and punish unsafe work practices.

What matters does the clique control?

Clique controls are most often—and most notably—exercised over output. The typist who persists in averaging 110 words a minute when the group has decided on 50 words stands an excellent chance of being disciplined. So does the messenger who makes the round trip to the bank in 10 minutes when all others take 45.

Incentive-pay plans rapidly become a focus for clique action; the per cent of standard to be made by the group will be carefully controlled. If it seems to the group unwise to produce more than 500 units a day, steps will be taken to control the worker who consistently produces 600. In seeking to please management, the clique feels he threatens his mates and fellow members; therefore, group security is felt to justify severe punishments. New members are quickly indoctrinated; as early as 1901 Frederick W. Taylor observed that the new worker with high productive ability will adjust his output to that of his fellows, and that the surest way of spoiling a good worker is to place him with a "sour" crew. On the other hand, a slow worker will extend himself to produce if he is

placed with a crew that has outstandingly high standards.

Information given management by workers may also be under control of the clique. The group may have found—or may feel—that anything they tell Manager X will be used against them. They may be right or wrong in this belief. Either way, Mr. X won't get much information.

The clique will exert controls also over the integration of outsiders. If a new worker seems to pose no threat to a group, he will slip into the team without difficulty. If the clique correctly or incorrectly sees his introduction as a threat, he will be subjected to strenuous pressure.

Still another area of clique controls is that of company procedures, or regulations. If the procedures are accepted by the group, they will function with ease and flexibility. When they appear to pose a threat, they will be sabotaged, ignored, violated, or forgotten.

Cases involving change often arouse resistance. The group has developed a pattern of acceptable social relations based upon the status quo; and new policies, new methods, new people, new orders—or even new physical facilities—may upset the applecart. The group tends, therefore, to view anything new with alarm, unless it is known, understood, and accepted in advance.

It's pointless to become angry at cliques and their systems of control—and it's a handicap to pretend they don't exist, will go away if ignored, or can be wiped out by management decree. Nor can it be honestly said that the people who belong to cliques are disloyal—for cliques exist among foremen and supervisors and top managers as well as among production workers. The college-educated supervisors, for example, may feel superior to the group of supervisors who grew up with the company—and the feeling may be mutual.

At every level of management, the informal organization poses both a problem and a challenge. Working with people, understanding them, meeting their needs so that they can meet your needs—these are the professional skills of the supervisor. It is his job to recognize the clique patterns in his work group and to help these informal and divergent groups find satisfaction in working productively to benefit themselves and the company.

Formal organization vs. clique organization

The first step in managing the clique and turning it into productive channels is to recognize that it exists. The next step is to recognize that the clique organization is different from the formal or chartered work organization in a number of ways.

1. The formal organization is developed by management and is logical most of the time. It has a goal, is

based upon principles and laws of organization covering authority, responsibility, and span of control. It includes descriptions of each job, and defines legitimate channels of command and communication. It is based upon property rights of the owners and upon the objectives and obligations of company management.

2. The informal organization is an unplanned, uncharted, constantly changing alignment of employees into informal groups. These groupings are based not upon logic, but upon the sentiments, emotions, interests, and endowments of the members. The basic unit in this informal organization is the clique, and the existence of the clique depends upon its ability to fulfill the social needs of its members.

A principal purpose of supervision will always be the fitting of informal groupings into teams that roughly match the formal organization. When this is done with insight and understanding, the goals of the formal organization will be achieved—and surpassed. For the manager to use such insight does not necessarily mean he is soft or spineless.

The goals of the formal organization are such matters as profit, quality production, low costs, control, innovation, and growth. These can also become the goals of the informal organization under skillful leadership. Understanding and communicating company goals demands conscious, rational, and orderly thinking. The same rational approach is needed in dealing effectively with the informal organization.

Managing the clique

How then, can a supervisor develop skill in managing cliques, and in bringing their goals into congruence with those of the formal organization? Here are some basic guides drawn from the practice of successful supervisors.

1. *He knows his people,* their background, education, personal interest, likes, aptitudes, weaknesses, endowments, and work habits. He collects this information daily, adds to it constantly in his contacts with his people. He classifies, sorts, and correlates it. This doesn't mean keeping "black books" or written records. Nor, for the practical supervisor who does not aspire to the post of company psychiatrist, is history that goes all the way back to childhood necessary or even relevant.

General Foreman Paul M. was a sociable fellow, yet he felt too much overcome by job pressure to act sociable—until he woke up one day to find himself an outsider in his own department. After some painful self-evaluation he made "shooting the breeze" with subordinates a regular part of his daily program. It didn't take long for the men to realize that Paul was, after all, sincere, interested in his people, and

approachable. His own zest for his work and his liking for his people was increased. And he knew more about what was going on in operations. People tended to keep him posted. "I found I could always have an answer when the boss asked questions," he reported. Mostly this being in the know grew out of his showing a concrete interest in people.

2. Armed with as full a knowledge of the people as is practical, the successful supervisor watches and *notes how they relate to each other*. Who likes whom? What are the social lines? What group eats lunch together, what group meets outside, what group or pairs double-date, who has "gone in" with another on a car pool, a duplex home, co-signed another's note? What occupations seem to be close-knit groups, which ones seem to do the most bickering? Do the private stenos freeze out the pool stenos, do the mechanics avoid the machine operators? The informal organization begins to emerge at this point. Social scientists use "sociograms" to do this, but for the supervisor, the situation is too large and too fluid for rigid charting.

In a large eastern metal-container plant the assembly-line crews on the sixth floor were in constant friction with the packers on the floor below. The finished goods dropped down a chute from assembly to packaging. Close coordination was important since the packers had to know what was coming down the chute, and the assemblers had to keep up with label changes. The packers often backed up the lines, and the assembly people often switched goods without giving the packers prior notice. The principal efforts of each group seemed to be aimed at getting the other group into trouble. The assembly people tended to lord it over the packers, and often told them over the intercom "You people are supposed to service us." The packers disliked the high-and-mighty style of the assemblers. The supervisor of the department started a program of switching people for short periods from one department to another. After seeing some of the packers' problems at first hand, the assembler went back to his department with a more helpful attitude. After a month of such switches, lost time caused by conflict between the departments was abated.

3. The supervisor should ask himself, *where are the major divisions of interest* in the department or company? What are the major cliques? Who belongs to them? How do they give status to their members? What is their relationship to the company as a whole? To other cliques? How tightly do they control their members? Who are the informal leaders? Are there "loners" who have no clique? Why are they rejected—or why do they stay out? Which cliques appear friendly to the goals of the company? Which

are neutral? Which are hostile?

Plant Manager Y was interested in cutting direct-labor costs in manufacturing and felt that this should become a major concern of his foremen. Accordingly, without talking to the foremen, he directed the engineering manager to plan and present a methods-improvement training course. This course was given for two hours a week after work—without extra pay—and was compulsory for all foremen. Six months after the completion of the course not a single methods improvement had been suggested by any of the foremen attending the course. Neither pep talks nor scolding produced any results. The plant manager concluded that the course was no good, the engineer ineffective. But some of the foremen told an outsider that "nobody wants to go to all the trouble, because the engineer would get all the credit anyhow." From the unanimous failure to cooperate it seems likely that the foremen, antagonized, had tacitly agreed to boycott the plan.

4. The final point is to study *the relation of the people to their surroundings*. Is Mary X bored with running her machine? Is Joe G. vocally critical of his job and does he reflect it in his performance? What would be the effect of changing the type, location, size, or characteristics of the desks, machines, chairs, telephones, uniforms, and other physical objects in the work environment? What are the dissatisfactions in each job; what are the satisfactions? What kinds of status does each person get from his physical work surroundings? The same thing may represent different values to different workers.

In a New Jersey electronics factory the manager of an assembly department employing women became annoyed because the girls talked to one another all day long. Signs forbidding talking did not work, and the foreman seemed incapable of stopping it. Over the weekend, the plant manager had a crew of carpenters come in and install plywood partitions between the workplaces, thus cutting each girl off from her neighbor. By Monday noon the girls had reached a halt in output and during lunch hour they held a meeting in the cafeteria. They sent a delegation to inform the foreman that they were on strike until the partitions were removed. "Most of us are married women," one delegate declared, "and we aren't going to be treated like kids." Another amplified the nature of the complaint thus: "We have to sit at those darn benches all day, and if anybody wants to make changes they ought to talk to us about it first." After consultation with the group, it was agreed that the panels would come down, and that in turn the girls would control the chatter.

A departmental meeting might have achieved the same result, without causing a near strike and a

substantial bill for putting in and ripping out the partitions. To many workers, individual partitions would have represented privacy and increased status. But for this group, contact with others was a valued part of the compensation for the job.

Any unheralded change in the work situation, even one intended solely for the comfort and benefit of the employees, can boomerang. A partition, a typewriter, the kind of machine a man has, his location near a window—all have meaning to the group.

Knowing his people, seeing how they relate to each other, to the major groups in the department, and to their physical surroundings, the supervisor can work constructively with cliques. As he grows in understanding of the goals of the informal organization he can begin to relate them more closely to the goals of the company.

Perfect reconciliation may never be possible. There may be physical, social, and economic barriers beyond the control of the most skillful supervisor. But the major block in working with and through cliques will be overcome when the supervisor has recognized the reality of their existence and the importance of their goals. ◆

The Real Decision Makers

IT WAS ONCE THOUGHT that decision making was strictly the bosses' prerogative.

"I make the decisions around here" was the kind of remark reserved only for the top executive. But recent research in company-policy procedure has given a jolt to the management ego. For it is now being recognized that all the lower echelons of an enterprise make important, if not the key, contributions to the decision-making process. By the time Mr. Big is called upon to put his stamp of approval or disapproval on a particular project, everyone down the line has had a hand in the formation of the final "yes" or "no."

And so it is on every policy matter. The boss's mind is made up for him by the rest of the hierarchy. Business has become so complex and intricate that no one man, or one group of men, could possibly absorb the myriad of facts, conditions, and alternatives that go into a major decision. This in part explains the hectic concentration on what is called "management development."

If, then, the boss is not the only real decision maker, the subordinates have the fate of the company in their hands. The success of a business boils down to having the right combination of people all along the line.

—LAWRENCE STESSIN in *Forbes*

By Lawrence A. Appley

Organizations don't make decisions—people do.

THIS *state* is way behind in its road-building program."

"The *government* is getting tough on income-tax evaders."

"The *school* does not permit fraternities."

"The *company* gave out large bonuses this year."

Statements of this type are heard every day—practically any time conversation takes place between people. "The state." "The government." "The school." "The company." What do they mean? What is in the speaker's mind when he says "the company"?

"The company just brought out a new product." "The company built a new plant." "The company raised prices." "The company promoted my brother." What is "the company"? Is it a structure, a legal paper, a personality, or just a *thing?*

One receives the impression that "the company" is all about us. It engulfs us. It is like an octopus, a Santa Claus, a dominating parent, a judge, or a doting grandpa. It seems phantomlike—you sense it but cannot see or feel it. You cannot even describe it. "Why, it's just the company, that's all."

Let's destroy this curious phantom right now. The company is not brick and mortar, it's not land, it's

not money, it's not products, machinery, or equipment. "The company" is a person or a group of people, depending upon the situation involved. "The company" is the person or group of people that makes the decision or causes whatever we are talking about to be.

If my brother works for the sales manager, then Pete Smith, the sales manager, promotes my brother. If prices require action by the board of directors, then the directors raise the prices. The engineer, members of his department, and the contractors build plants. If the president has the authority to increase wages, then Al Jones, the president, grants a wage increase. These actions are taken by people—individuals and groups of individuals—not by some great mysterious phantom.

In this sense "the company" is changing all the time as personalities in it change. When the foreman for whom I work is promoted and I get a new foreman, the company, for me, has changed. Two foremen cannot be exactly alike. When the president retires and a new president takes office, the whole company changes to as great a degree as the two men differ in their abilities, thoughts, and practices.

"Why shouldn't the company raise wages again and again and again?" "Why shouldn't the company build new and modern offices and factories?" Why shouldn't the company do this and that? Where does the money come from? To hear some talk there is a phantom that pours it out. All "the company" has to do is say "yes" and the money is produced out of some great vault.

The company does not say "yes." The company cannot talk. Some responsible individual or group of individuals says "yes." Then *people* have to produce it. The *people* in research and development have to design better and more products; the *people* in manufacturing have to produce them at lower cost and of higher quality; the *people* in sales have to sell them in greater quantities; the *people* in service have to back up the sales department so that repeat sales are inevitable; the *people* in accounting and credits must collect. *People* must produce more if there is to be more to distribute.

When we in the company say "the company" should do something, we mean "we" should do it because we are the company. When we insist that our officers, our directors, our bosses do something, we have to accept the responsibility and obligation for doing what is necessary so that our bosses can do what we want them to do.

The Communists have a deliberate and studied technique for getting "the people" aroused against "the government," "the police," "the company," or whatever the authority may be. They try to get shots fired, clubs wielded, or bricks thrown to

excite "the people" against some great phantom that no one can describe or identify. Their stock in trade is the phantom ogre.

But it never is some unknown monster that people are actually arrayed against. It's human beings with minds that are subject to influence, bodies that can be built or destroyed, hearts that can be hardened or softened, and souls that can be inspired or depressed. When we refer to "the company," we are talking about human beings just like ourselves.

When the company does something, that means some person or group of persons does something. That means a person is held responsible for the decision that is made. That means a person (or group of people) has to expend effort to carry out the decision. That means a person has to worry about it night and day. That means a person will be blamed and made to pay a personal penalty if the decision is wrong, and may get credit if it is right. He bruises just like any other human being and similarly glows from praise.

When we refer to "the company," "the state," "the school," we should hesitate long enough to clarify not *what* we are talking about, but *whom* we are talking about. ♦

Before You Can Delegate . . .

DELEGATION has been spoken of as an art; and an art is something more than a set of rules. Before he can delegate successfully, the manager must demonstrate four important personal attributes:

1. He must be receptive to other people's ideas; he must have a minimum of the NIH factor (not invented here!) in his make-up; he must be able not only to welcome the ideas of others, but to plant his own ideas in their minds and compliment them on their ingenuity.

2. He must be sufficiently placid to see others make mistakes and to consider the cost of such mistakes an eminently worth-while investment in the development of his most valuable resource—people.

3. He must be willing to forego the luxury of blowing his top, of berating his assistant. Delegating authority means that the boss must limit his criticism of the person who tries but fails. For criticism can discourage the person's willingness to try again, to make use of the authority delegated to him.

4. He must be able, knowing the details of the business, to exercise great powers of self-restraint. He must be content with exercising broad controls over results; he must refrain from telling the sales manager how to sell or the comptroller how to keep accounts, no matter how expert he may have been in either field.

—*Personnel Information Bulletin*

The Romans Had Words for It

THIS LIST of some of the most common mistakes of man, compiled over 2,000 years ago by the Roman philosopher Cicero, can help you to avoid many of today's managerial pitfalls:

The tendency to worry about things that cannot be changed or corrected.

Insisting that a thing is impossible because we cannot accomplish it.

Refusing to set aside trivial preferences.

Neglecting development and refinement of the mind, and not acquiring the habit of reading and study.

Attempting to compel other people to believe and live as we do.

The delusion that individual advancement is achieved by crushing others.

"Gesundheit!"

—*The Iron Age*

NEW SKILLS

TWO WORKMEN arrived at their factory on a Monday morning. As they sat in their swept-fin automobile, they looked with surprise toward the factory where automobiles were piling up by the hundreds—under windows, in entrances, through doors. One said to the other: "My gosh, I forgot to turn the factory off!"

Factories that operate without the aid of human hands—except for pressing the right button and turning the right switch—are no longer part of the fantastic world of Buck Rogers. They are present realities. Electronic brains work for statisticians, insurance firms, airline companies, the Armed Forces, and election prognosticators. Given the correct figures, they provide mathematical data in a split second that would take months of human effort to produce. Across the whole range of American industry, almost every enterprise has a story to tell of electronic controls, "feedback" mechanisms, and the like. Science outraces the dictionary as science-fiction names like "Univac" and "Ca Nmn W./0834:3" come into the vocabulary.

And the union member, the company president, the man on the street ask: "What's going on here?"

What is going on is this: The American economy is entering another stage in the evolution of U. S.

Left: a reactor's face shows a checkerboard pattern of holes through which tons of pure uranium are loaded before uranium atoms can fission or split in a chain reaction. The technician stands on an elevator, enabling him to move to any level.

Brookhaven National Laboratories

technology. During the nineteenth century, the great shift from handicraft to machine labor took place. By World War I, industry had entered another phase—mass production. Moving conveyors, automatic machinery, electrification—all are carried forward into the technology of today. There are new tools as well—transfer machines, computers, tape-controlled machine tools, and feedback controls, to name a few.

Although the fruits of improved technology are evident in the form of more and better products for millions of Americans, the impact of that technology upon the traditional structures of American life is not as evident. This much seems clear:

1. The changes in technology will result in changes in the nature of work.

2. Because the nature of work is changing and will change more, the skills required of workers will also have to change.

The characteristic of technological advances in the past has been increasing productivity. The nation is now at a level of productivity —or output per man-hour—about three times as high as it was at the turn of the century. This rise has made possible a substantial increase in the standard of living, simultaneous with rapid population growth. Continued increases in productivity mean more products with less work.

What kind of workforce will the new technology create? To answer that question, at least in part, the U. S. Department of Labor conducts case studies in plants and firms that have incorporated the new ma-

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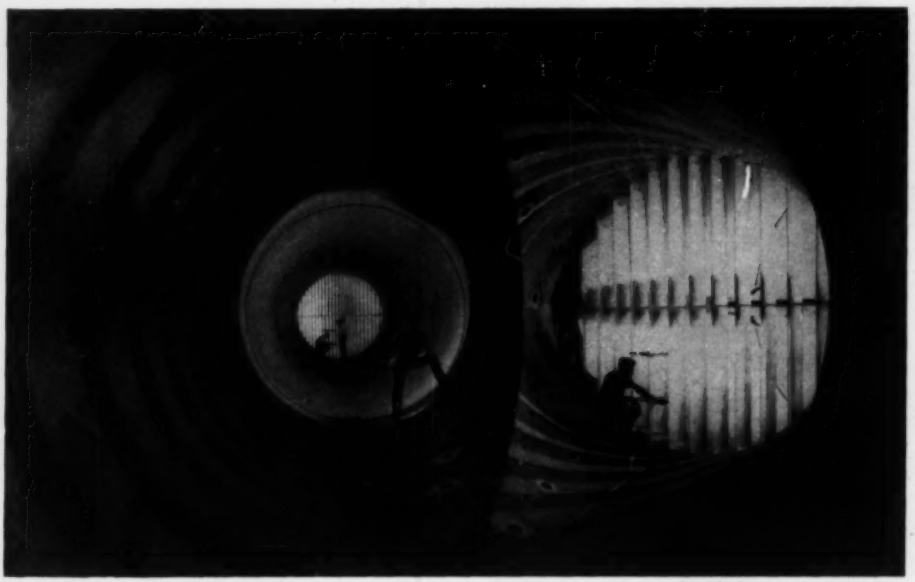
Adapted from a chapter of the U. S. Department of Labor publication, *They Are America.* Available from the Superintendent of Documents, Washington, D. C., $.60.

chines. A radio plant that had adopted the printed circuitry technique, an insurance company that had purchased a computer, a bakery that had undergone extensive mechanization, a petroleum refinery plant, and an airline that uses an automatic system for handling reservations—all were studied. Surveys are planned also in the metalworking, wholesale-distribution, and chemical production industries.

These studies ask some basic questions: What changes in productivity have taken place? What changes in employment? What new occupational needs have been created, which discarded? From evidence gathered thus far, this much seems probable:

Steady but slow growth

The rate of technological improvement in industry is not as swift as it might seem. There is no overnight recasting of industrial America, but instead, a steady growth. Where an improvement has been experimented with in a segment of industry and proved useful, a more extensive use in the future is indicated.



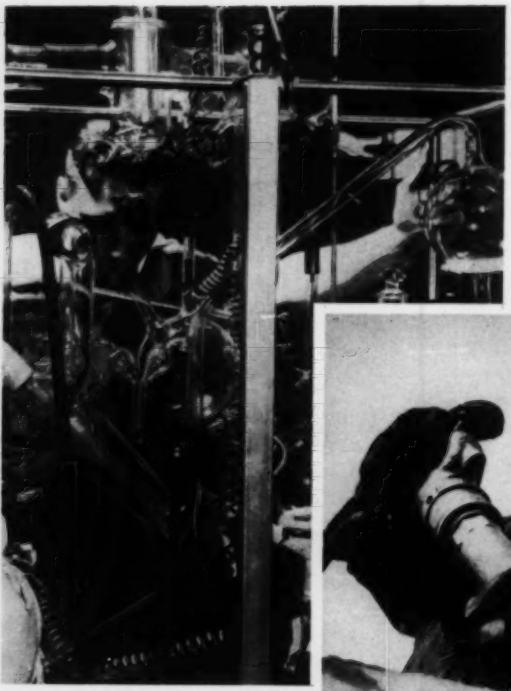
NACA Photo

A 4,000-mile-an-hour wind howls through these Unitary Plan Supersonic Wind Tunnels, used for testing models of aircraft at up to five times the speed of sound. Skilled designers and craftsmen planned and built these tunnels.

Lukens Steel

Operator uses TV and remote control to guide steel plates safely at proper speeds through heating and cooling.

So far, the available evidence does not indicate large-scale layoffs in plants introducing new machines and methods. None of the plants studied has laid off large groups of workers. Management in each case has sought to expand and diversify output rather than displace labor. In each case, advance planning in great detail was used to minimize the effects of displacement. An insurance company, for instance, studied reassignment and retraining problems for two years before installing the first computer. A radio-and-TV plant prevented layoffs by upgrading the hand-assembly jobs into machine-operator jobs. It also timed the change to coincide with a period of seasonal expansion. A bakery, which installed equipment to handle bulk materials, called in union representatives at an early date and worked



Left: Chemists use a molecular still to distill materials that would decompose with ordinary distillation techniques.

Standard Oil Co. (N.J.)

Standard Oil Co. (N.J.)

Skilled boilermaker faces a challenge in new atomic installations that require a plate tightness as nearly perfect as man can make it.

out with them a reassignment of workers and a readjustment of the work schedule.

Service-group expansion

The improved technology promises to accelerate a trend that has continued through the first half century since 1900. Rather than a decline in employment resulting from labor-saving machines, there has been a shift in emphasis in employment from the goods-producing industries (mining, agriculture, manufacturing, and construction) to the service groups (trade, finance, government, transportation, communication, and service).

Improving technology creates a demand for skilled workers, engineers, and technicians. The size and rate of this demand is now pressing.

In 1910, for example, unskilled laborers and farmers comprised 45 per cent of the labor force. In 1950 they comprised only 20 per cent. And the proportion is going down. Semiskilled and clerical workers, by comparison, made up only 25 per cent of the labor force in 1910 and almost 45 per cent in 1950. At the same time skilled workers comprise about the same 12 per cent of the labor force as they did in 1910—and there are severe shortages.

Social security and unemployment compensation provide assistance to people whose jobs might be threatened by technical change. Collective bargaining covers about one third of all workers in the country and two thirds of those in manufacturing. The collective-bargaining process gives these workers an opportunity to understand and provide for the changes that are taking place.

Population and the workforce

To understand the scope of the skilled-worker problem, especially in relation to improving technology, it must be placed in its population perspective. By 1965 there may be 193 million people in the United States. If our standard of living is to continue to rise at the same rate as in the recent past, we will have to produce some $560 billion worth of goods and services (at 1955 price levels). To do that, about 74 million workers will probably be needed, or 9 million more than in 1956. Since the labor force, including armed services, will probably total about 79 million, the labor supply should be adequate in terms of numbers—but not necessarily in terms of skill.

In the 1956 labor force of 70 million men and women, only 9 million were classified as skilled. Yet the new technology requires levels of skills and education above the present averages.

Since the labor force itself will expand in the coming years, the big question is: How are we to develop an adequate skilled workforce?

To understand the problem, we must know who will make up the labor force.

1. The male labor force will increase by 5 million, but only in the younger (14-24) and older (45 and over) groups.

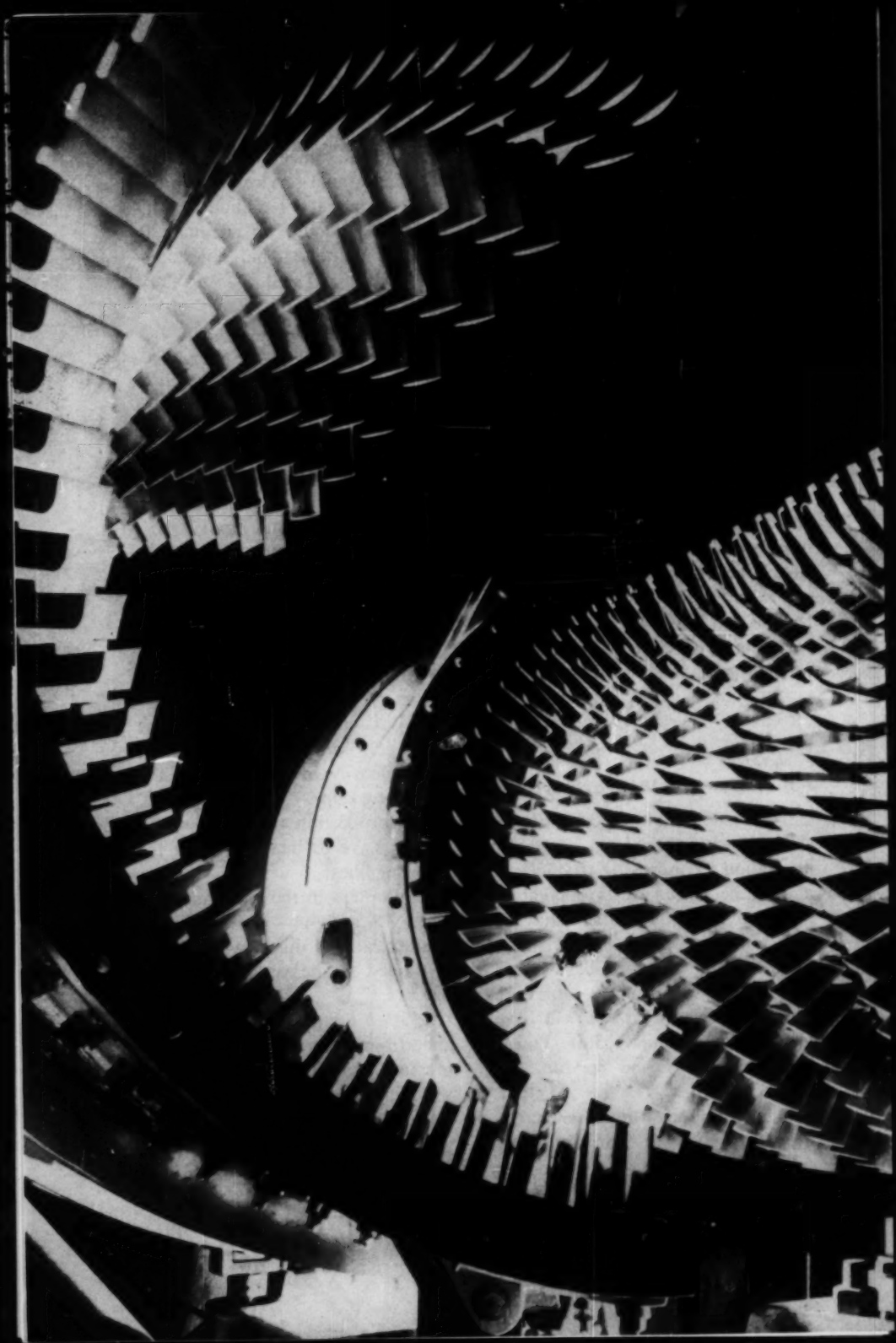
2. Women workers will increase by a little more than 5 million, also primarily in the younger and older age groups.

The proportion of skilled workers will have to increase along the following lines:

1. Workers in the age group between 25 and 44—which will increase relatively little—will have to be trained to the very best advantage.

2. Since the greatest increase will come from American boys and girls now in school, it is evident that now is the time to develop their skills.

From about 20 million children aged 5 to 13 in 1945, there will



Left: Technician checks a seven-stage axial-flow compressor built to push air at supersonic speeds for testing; the rotator is in such perfect balance that it can be turned with the fingers of a hand.

be close to 36 million by 1965. Therefore, we will need 460,000 more elementary-school teachers to cover additional enrollments, plus 1,440,000 to replace those who will have left the profession by that time.

3. The nation must plan to utilize the skills and experience of people over 45.

4. Finally, since women will make up more than half the total labor-force increase, the place of women in our employment and personnel policies will have to be reexamined.

A skilled worker, by definition, is one who has acquired distinctive ability and a high level of competence in his job through training or other special effort.

There is a short supply of these workers. In order to maintain the present level, some 250,000 new craftsmen and technicians must be trained each year, as well as adequate numbers of scientists and engineers.

Shortage areas revealed thus far, by occupation, are: engineers, scientists, physicists, teachers, physicians, nurses, tool and die makers, machinists, airplane mechanics, instrument-repair men, sheet-metal workers, patternmakers, electricians, and laboratory technicians.

What can be done?

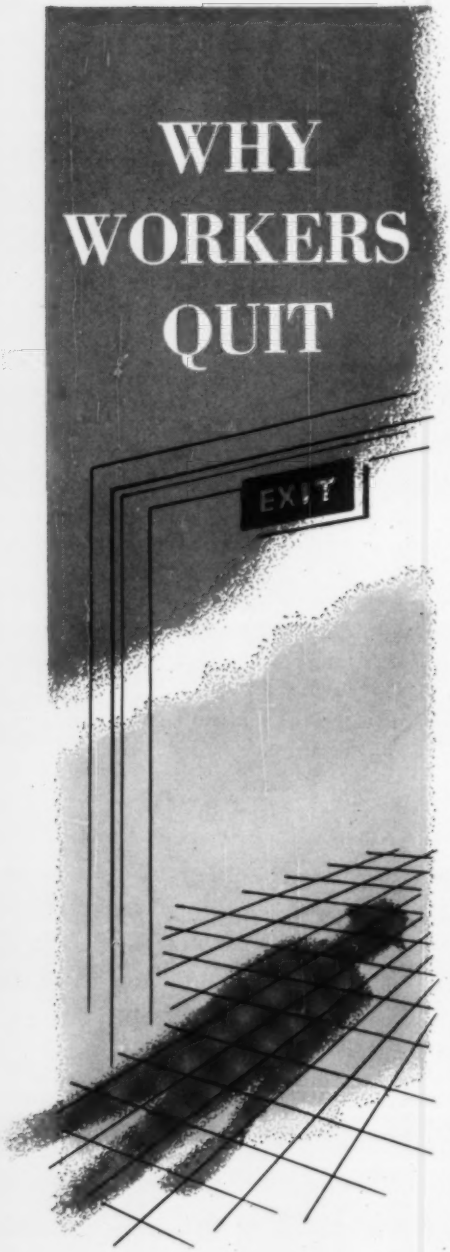
From the facts it is evident that the following can be done:

Students should be counseled and advised of the great opportunity of the future. School facilities must be made adequate. Industry must do more to train its present workers and prepare for its new ones. For only by a conscious effort can the brilliant opportunity of the future be made a living reality.

Look in Your Own Backyard

AN INDUSTRY-WIDE TALENT SEARCH may provide a partial solution to the increasing need for more brains and talent, says Dr. John B. Miner, research associate at Columbia University. Dr. Miner, who has completed a nation-wide survey of employee intelligence, says that managers in need of more skilled workers should look first in their own backyards. He estimates that more than 65 per cent of all workers have the brainpower necessary for higher-level jobs than the ones they're holding now. If every employee were given a position better suited to his intellectual capacities, he says, a majority of the working population could be employed in highly skilled jobs.

WHY WORKERS QUIT



By William Ruchti

"THE BOSS FIRED a friend of mine. So I told him I'm fired, too."

"I wanted an extra day off to go on a picnic. The boss wouldn't give it to me—so I quit."

"I didn't want to be transferred to another department—there was nobody to talk to there . . ."

These are answers three applicants for work at a large New York department store gave when they were asked why they had quit their previous jobs.

Such highly subjective, seemingly irrational reactions are part of the answer to that costly and confusing question: Why do workers leave their jobs? As experienced supervisors know, these trivial reasons may cover up deeper and perhaps more logical dissatisfactions with the job. In any case, the chances are that each of these three "quits" could have been avoided.

Employee turnover is an imposing problem. The national separation rate now averages 3.2 per cent per month—close to 38.4 per cent a year. And personnel people estimate that six out of seven of these job changes represent quits rather than dismissals.

To say that they're expensive is to put it mildly. Computing the current national rate at the conservative cost estimate of $200 per worker, turnover today costs industry more than 1.25 billion dollars annually.

While turnover is often impossible to predict, it is not impossible to describe. Job-hopping generally varies with economic cycles, increasing during prosperity. It differs from industry to industry, with farm labor showing great stability and industrial workers the greatest mobility. It differs within industries. In transportation, for example, automobile workers move around often while railroad employees (whose pension plans encourage seniority) tend to stay put. It varies by job; hourly paid workers quit more readily than salaried personnel. And it even fluctuates for the individual: The quit rate is highest during the employee's first month on the job and remains high for the first year.

The young, the unskilled, and the low-paid—the workers most in need of supervision—are most likely to resign. Conversely, supervisors themselves are an unusually stable work group.

A survey of workers at the Lockheed aircraft plants on the West Coast indicated that younger men, those under 24, quit because of dissatisfaction with job placement. Men between 24 and 37 quit most often because of wages. Men over 37 leave their jobs mainly for personal reasons, especially health. To sum up, as seniority increases, men quit less frequently because of conditions on the job and more frequently for personal reasons.

Women, contrary to many people's opinion, do not necessarily change jobs more often than men. Surveys have indicated that, while women have a greater separation rate in manufacturing, they show greater stability in office and clerical work.

The causes

But describing the characteristics of turnover doesn't necessarily pinpoint the causes. Identifying these causes is a major management dilemma.

Spotting "the" reason for quitting is difficult because often there is no one reason. Workers usually deliberate for some time before quitting. They grow disgruntled, start to build a case against the job, but will often wait for a trigger cause (such as "The boss fired a friend of mine"). By the time he quits, the worker himself may be honestly confused about the reasons.

Furthermore, he may be unwilling to give management his true reasons. Dr. Wayne L. McNaughton of UCLA's Graduate School of Business Administration surveyed an aircraft facility where 56 per cent of over 10,000 employees had resigned in the span of a year. He talked to those who had quit, from two to eleven months later, and found that almost 3,000 —more than half—had not stated their true reasons.

Most of them said that they were going to jobs with more money or

that their families were moving. But when interviewed, they admitted they had actually left because of poor supervision or bad working conditions. Management, then, may often learn only one side of the picture.

Surveys of specific samples around the country have turned up a wide variety of complaints, among them low wages, poor selection, poor placement, inadequate training and supervision, unsatisfactory working conditions, safety hazards, lack of opportunity, even lack of fringe benefits.

One attitude survey showed that employees had left jobs for the following reasons: failure to receive credit for good work, favoritism shown relatives of bosses and/or senior employees, poor food in company cafeterias, warm drinking water, lack of lockers, unavailability of parking space, time lost because of breakdowns or bad scheduling, use of layoffs as punishment for errors, unwillingness of supervisors to hear complaints or suggestions, noise, and crowded or dirty washrooms. The latter two complaints are frequently mentioned by women employees. Women also are more likely than men to resent excessive heat or cold. They tend to object to compulsory uniforms and many dislike an atmosphere in which they might hear dirty jokes.

Two reasons for leaving turn up consistently: higher pay and a better job elsewhere. In five major surveys reported recently in the Department of Labor's *Monthly Labor Review,* these two factors together accounted for from 40 to 55 per cent of all voluntary job changes.

The big two

1. *More money*

It's obvious that many people change jobs to increase their earnings. Yet, "getting more money" in a new job may be only an illusion. One Illinois study found that almost 80 per cent of the workers who quit one job to accept another ended up working in identical capacities at the same—or lower—salaries.

2. *Better jobs*

What makes for the "better job?" Physical factors like pleasant surroundings, improved equipment, parking lots, or recreational facilities are frequently cited. Though these matters are largely beyond the control of the supervisor, he can tell upper management about the need for them when it exists.

Many workers also require from the "better job" a greater opportunity for advancement: the chance to receive thorough training, the opportunity to move ahead, openings to improve job status as well as pay.

Here, of course, supervisory action can be very important. First, the supervisor should describe the job accurately *before* the employee starts it. That means listing its disadvantages as well as its advan-

tages. In production work, for example, the employee should be told how much physical stress the job entails. Second, the worker should also be informed of future prospects—not just the company's, but his own. The supervisor should tell the worker what promotions he can aim for and how to work toward them, instruct him when possible and, if there's precedent, tell him also how others have won similar promotion.

"A better job," like "better pay," may prove to be an illusion, of course. In the McNaughton survey, when people were asked about their former jobs some months after leaving them, over half the respondents said they would be willing to return if given the chance. Fifty-seven per cent with more than 11 months' service said they would like to go back to their old employers; a staggering 75 per cent employed less than 11 months said the same thing.

Supervision: the key factor

If good supervision can be considered a brake upon turnover, poor supervision is certainly a spur. People who conduct exit interviews at 48 companies throughout the country reported in retrospect that, regardless of the specific causes cited, "lack of ability of the supervisor" was evident in four out of five quit patterns. This means that poor supervision, if not a direct reason, was at least involved in 80 per cent of the turnover at these companies.

Other studies corroborate the fact that employees react strongly against poor supervision. Here is what 1,089 employees "of a successful and well-managed business" told Professor Earl Brooks of Cornell University's School of Industrial and Labor Relations when he asked them how they felt about the company:

Eighteen per cent felt responsible to too many superiors.

Twenty per cent had never been told how they were doing. (Another survey, cited in *The Management Review* last year, quoted an actual follow-up interview: "I asked my supervisor a couple of weeks ago, just in passing, how I was doing and he just said I'm all right. I think it would be a good idea if my supervisor or somebody . . . would let us know how we're doing. A fellow likes to know how he is getting along.")

Twenty-two per cent received conflicting orders "frequently" or "most of the time."

Twenty-eight per cent said their supervisors would dodge, stall, pass the buck, or give only partial answers to their questions.

Twenty-nine per cent could get no action on their ideas. Of these, 7 per cent said their superintendents discouraged ideas and suggestions, and 22 per cent admitted that their bosses listened all right—but then forgot.

Thirty-one per cent—nearly a third—said they were *never* told the reason that policies or procedures affecting their work were changed.

Thirty-six per cent believed they did not get nearly as much instruction as they needed.

And 50 per cent felt that the best-qualified people were *not* selected for promotion when better positions came along.

Though some of these complaints may be unjustified, they all reflect some kind of inadequacy in the relationship between the man and his boss.

Needs of new employees

Many of the problems stem from a worker's first days and first weeks on the job. Turnover is especially high during this period. And even among workers who remain on the job, first experiences can start a train of events culminating in a resignation. It's been said that "the time to stop a quit is when he walks in the door."

The following check list, based in part on suggestions by the Research Institute of America, suggests supervisory action to be taken before and during the employee's first days on the job:

1. *Before hiring:* The supervisor should try to fill the job, if this is practical, by transfer or promotion from within.

If it is necessary to hire from outside, the supervisor should first notify employees of the opening. Employees should feel that any qualified candidate they may refer for the job will be considered. Even if they do not have friends or relatives to suggest, the announcement of the opening will prepare them for a new man's arrival.

Furthermore, the personnel department (or other hiring agent) should be supplied with an exact job description so it can select the best-qualified applicant.

2. *Interviewing the prospective employee:* Although this is often handled exclusively by the personnel department, many companies also send the job candidate to visit the department where he is to work. This gives the department manager a chance to meet and talk with him. It also gives the applicant a quick look at the department.

3. *After the job has been filled:* Let the new employee know when and where to report and what kind of clothing, or uniform, he should wear. If there are plant facilities for parking, dining, or the like, these, too, should be pointed out. He should know exactly when and on what basis he will be paid. If there are company brochures or promotional material for new employees, he should receive them now, before he reports to work (but while he wants facts to tell his friends).

This is the time, too, to tell other workers that a new man has been hired.

4. *Before the new employee starts:* Make certain he is listed correctly on payroll and other schedules. Prepare his workplace and stock it with the necessary equipment and supplies. It might be a good idea to lay out his first day's work, if possible.

5. *First-day induction:* The new man should be welcomed cordially, shown to his workplace, and given any additional written information that may be required. This is a good time to let him ask any questions he may have about the job. He should be taken on a tour of the department, introduced to fellow workers, and instructed on rules, regulations, and customs. It's also a good idea to provide him with a department floor plan (where it is complex) and, if possible, a roster of fellow employees in the department.

Some firms introduce new employees via a sponsor system: assigning a friendly staff veteran to act as the newcomer's teacher-guide. It frequently results in the new worker's gaining an immediate friend and, with that, easy admission into the worker group. While serving as sponsor may mean extra work for the senior employee, the post can be presented as an honorary one and, therefore, a desirable job. One New York manufacturer who tried a sponsor system found that it reduced turnover 80 per cent during its first three months.

The first day is the day to inaugurate training. Don't leave the job only to company publications or trainee classes; the new employee may need extra help. If you are instructing him yourself, teach him through a progressive series of easily achieved steps. Don't throw everything at him at once or the job will appear to be insuperably difficult, however simple it actually is.

Studies have shown that people who don't feel quite equal to the demands of their jobs are likely candidates for the quit list. A survey of the Harwood Manufacturing Company, for example, showed that among 116 workers whose performances were *above* standard production there were no quits; in a group of 211 workers, rated *below* standard, there were 28 quits. Interestingly, the nearer a worker approached the standard, the more discouraged he became about the gap.

One approach which proved to be effective was to establish lower standards for the novice, raising them after beginners became experienced workers.

6. *First-week induction:* Just as the new employee should have a follow-up chat with his supervisor at the end of the first day, so should they talk together at the end of the newcomer's first week. The supervisor can then check if the employee has all the information he needs, if company standards are

clear, if the worker's abilities are becoming known, and if he is making a good adjustment to his job. This is also an appropriate time to stress teamwork and to resolve any personal conflicts that may have occurred.

Meanwhile, the manager is warned to watch for danger signals like loss of interest, a defeatist attitude, failure to grasp instruction, low initiative, lack of responsibility, poor teamwork, and excessive griping.

Procedure for all employees

But supervisors must also give constant attention to matters that pertain to the welfare of *all* subordinates: Make sure you have placed each worker in the job that, as nearly as possible, is right for him. If he's satisfied with his present job, he's less likely to seek out another one. Don't let training and instruction lapse; it should be systematic and continual. Even old-time employees who feel they "know the ropes" are pleased with a little follow-up attention. Equalize both the work and overtime loads. Eliminate any appearance of partiality. When you can make a promotion or give a raise, tie it in directly with merit and performance.

And be unfailingly sure that your workers enjoy two-way communication. It isn't enough to deliver "the word" to them; they must have the privilege of responding—and especially of airing complaints.

The Navy's Office of Industrial Relations advises: "When an employee comes to tell you he's quitting, listen to him. Don't interrupt. He has a story—you want all of it. If you believe he's not giving all of it, pleasantly and tactfully probe for the true reasons. A sympathetic ear can produce amazing results."

The purpose of the exit interview is not merely to create good will. It's to find out the problem behind the resignation and then try to solve it. The technique has proved its effectiveness: When a rubber company in Ohio adopted exit interviews, 50 per cent of the workers interviewed changed their minds and stayed. A good foreman can, in fact, cancel out the need for many exit interviews by talking it out with the employee when he first suggests that he's dissatisfied.

They'd rather stay

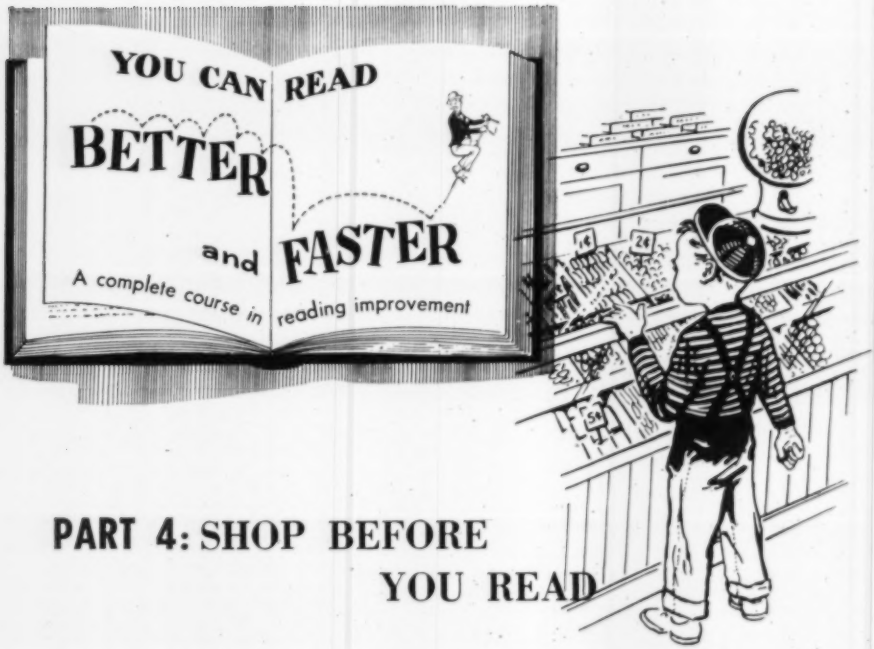
One final fact about turnover should cheer the supervisor: Most employees would prefer to stay in their jobs. In the last U. S. census, one fifth of the 59 million employed civilians reported that they had served the same employer for more than 10 years.

"The value that most workers attach to security of employment can scarcely be overemphasized," the Bureau of Labor Statistics points out. Workers prefer long

service because they prefer established routine, for one thing. Old-time employees enjoy the ease and prestige of knowing the company and its policies better, with the result that they often serve as counselors to newer workers. Staying with his company often qualifies the employee for fringe benefits like longer vacations, bonuses and/or profit sharing, and pensions. Further, steady employment usually keeps the worker close to family, friends, and known situations.

Men who are happy in their work tend to preserve the continuity of their jobs. For men must have work; the returns in friendly associations and personal recognition, no less than in actual income, are vital to human beings. People who have these satisfactions are, in private as well as occupational life, free from restless shifting.

In short, employees want "to make the team." Good supervision can, of course, help them do so. And once you've got a good team, you may not have to worry too much about turnover, after all. ♦



PART 4: SHOP BEFORE YOU READ

By Nila Banton Smith

Director of The Reading Institute
and Professor of Education, New York University

BEFORE YOU BUY a car you shop. You look over the various makes and size up their appearances, colors, promise of performance, price, and other features. Similarly, you should shop before you select an article to read; that is, take a preview.

A book, chapter, or article has certain prominent characteristics, just as a car or a suit has outstanding features. If you briefly study these characteristics before you read, your survey may be as valuable to you as your general sizing up of a car or suit.

In some cases the preview will provide you with all the information you need, and you may not have to read the selection at all. In other cases the preview will whet your appetite, increase your interest, and strengthen your motive for reading. And, when you do

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begin to read, you will find that your prereading insight has paved the way for speedier and more comprehensive coverage of the printed page.

How to shop

In making a preview, first study the title. The title holds a world of information, for it gives you a quick cue to the topic of discussion. It may determine whether or not you want to read the selection. If you decide that you do want to read it, then you have advance information and can read in terms of the promise that the title holds out to you.

Next, glance through the material to see if subheads are used. If so, a quick survey of them will be valuable. You should consider each one for the information it gives or implies. These subheads reveal to you the trend of the article as a whole. There will be occasions in which a preview of these subtitles will tell you all you want to know. At other times they will serve as door openers to better understanding of the text.

If any visual aids are furnished, study them for their significance. Look at illustrations carefully. They will aid your comprehension by giving you a vivid mental picture of the people, things, and locale dealt with. If maps are provided, study them. Your reading will be more meaningful if you have precise geographical locations in mind. If graphs and charts are provided, study them before you read the article. They will give you a quick grasp of relationships and proportions among data discussed in the text.

Next examine the length of the paragraphs. Turn the pages quickly and find out if most of the paragraphs are short, medium, or long. Remember, each paragraph is a thought unit and a single idea is developed in each. If there are many short paragraphs, this is a fairly reliable indication that the article will include many ideas but will not be heavy with detail. On the other hand, if the paragraphs are long, there will be fewer ideas, but each idea will be expanded by numerous details. On the whole, this material will be more difficult to read.

Finally, estimate how long it will take you to read the article. Count the words in several lines to ascertain the average number of words per line. Then multiply this by the number of lines in the article. Once you have estimated the total number of words, decide how long it ought to take you to read it. Don't be easy with yourself. Set as short a time limit as you think you can possibly meet. Then live up to it!

This is the fourth in a series of articles on reading improvement, serialized with permission of Prentice-Hall, Inc., from a book by Dr. Nila B. Smith, to be published in 1958.

SELECTION 1

After you have previewed the following selection, you will be given a test to enable you to find out how much information you have gleaned from your rapid survey.

Examine the title of the selection. What does it tell you? Obviously, it tells you that the selection is about an adventure in canoes that took place in Labrador.

Glance at the first subhead. What additional information does that give you? Since it is "Million-Paddle-Stroke Journey," you now know that the adventurers must have traveled by canoe and that it must have been a long journey.

Now look at the second subhead: "Rails Soon Will Split Wilderness." You now know that the trip was through a wilderness where there were as yet no railroads.

From the next subhead, you gather that the adventurers built fires to warm themselves or to cook, and that at times they had difficulty finding a beach wide enough for this.

Move your eyes rapidly over the rest of the subheads to find out what they tell you. At the same time, note the length of the paragraphs. Since they are comparatively short, there won't be too much detail; therefore you will be able to move right along in your reading.

Once you have done this, you are ready to take the test on page 37 to find out how much you know about this article without having read it. You will probably be surprised to discover the amount of information you have gained.

Beginning time: Hr. ___ *Min.*___

Labrador Canoe Adventure[1]

Two Indians ran dark hands and eyes over our twin aluminum canoes lying outside a warehouse in Burnt Creek, northern Quebec mining camp.

Prospectors, geologists, and drillers strolling by in their iron-reddened clothing expressed doubts about the unfamiliar metal craft. One hairy giant muttered something under his breath about "tin-can-oes." . . .

Despite pessimistic comment, we were confident the little canoes could carry us from the Quebec border across hundreds of miles of Labrador wilderness to Atlantic tidewater. It could be disastrous if they let us down! . . .

"Mathieu say the first jagged rock will gash 'em," interpreted John Michelin, one of our trapper guides.

"Well, they weathered a rough test last summer running the Susquehanna River," we pointed out, reassuring ourselves as well as the guides. "We'll go ahead as planned. They'll do better than you think."

[1] Andrew Brown and Ralph Gray, *The National Geographic*, July, 1951, pp. 85-99.

By journey's end the 18-foot aluminum craft were scratched and dented, but watertight and sound. And—final vindication—our guides wanted to buy them.

Million-paddle-stroke journey

In five weeks we paddled 578 miles on waters of Labrador's Hamilton River, trudged 61 miles over portages and up lookout hills, and navigated 150 fateful yards by raft. From height of land to sea level, each of us dipped a quarter of a million paddle strokes.

We embarked near the heart of the vast peninsula of Labrador-northern Quebec (Ungava). The end of our water trail was North West River, trapper's town on Lake Melville, tidal arm of the Atlantic.

A chief objective was North America's next-to-greatest waterfall, the seldom-seen Grand Falls of the Hamilton, a stupendous cataract 245 feet high. Niagara, by its huge volume, alone surpasses it.

We traveled the interior of the land where Europeans probably made their first landfall in the New World. Yet the tides of history have largely swept by this corner of North America. Explorers recoiled from Labrador's barren, arctic coast. The wooded inland, far more pleasing and habitable, still is rarely visited.

In Labrador's wilderness the dense spruce forest marches north, like an immense army, to the edge of subarctic barrens. Myriad lakes break its ranks; also stretches of spongy muskeg and the scars of forest fires. Water laces the country everywhere—twisting rivers, lakes great and small, and grassy marsh.

Moss takes the place of soil. Gray or yellowish caribou moss, really a lichen, covers drier ground with its fluffy mat. Crossing moss-quilted bog and boulder fields, every step is a gamble.

Rails soon will split wilderness

The Hamilton, Labrador's mightiest river, gathers its flood from this bewildering tangle. Long the domain of snowshoe and canoe, its western sources soon will echo to locomotive whistles and the clatter of cars on rails.

For the upper Hamilton basin encompasses part of a vast, newly explored iron deposit that straddles the Quebec-Labrador border region. Track laying has been begun on a 360-mile railroad to carry the ore from semi-barren hills of Labrador and Ungava to the Gulf of St. Lawrence, whence ships will bear it to the market.

It was early summer, 1950, when we set out to see and picture Hamilton River wilds. At Montreal we picked up our trapper guides, John and Leslie Michelin, distant cousins. They had come from North West River, Labrador, by plane. . . .

On a Sunday afternoon we launched our canoes and slipped away into the silent wastes. John Michelin, our head guide, took the helm and Andrew Brown the forward paddle of bright-red "Loon"; Leslie Michelin took the stern and Ralph Gray the bow of sky-blue "Trout." . . .

On Monday, after 25 miles of paddling down Dyke Lake, we clambered up Fault Hill. A mighty sweep of country lay revealed. Long ridges banded the gently rolling land. Lakes filled nearly every depression. Higher

hills thrust up bare crowns, overtopping the spruce and fir forest that reached, green and untouched, to the horizon. In silence we gazed out upon the haunting scene.

Beach barely wide enough for a fire

Skimming down the swift Ashuanipi River next evening, our wool shirts beaded by a steady drizzle, we searched for a campsite.

"We'll try here," John called out at last, indicating a narrow, rocky beach at the foot of a 40-foot sandy bluff.

Our paddles swung the canoes in toward shore. Ralph and Andy jumped out and tied the craft to boulders.

"We'll pitch the tent on top of the bank," said Leslie. "It's a good job we've got this beach to unload on, and for our fire."

It took fancy stepping to move around, after the fire was blazing and all the supper things were strewn along that skimpy shore. To pass the fire we had to climb the bank or wade the brimming river. . . .

Long after the sky was black we pulled ourselves up the steep slope to the tent. Cobblestones dislodged by our feet rolled out of sight and plunked into the inky Ashuanipi.

The following day was better. The rain let up and the clouds parted briefly. Toward evening we navigated our first bad rapid. A tossing run of white water—the icing on any canoeing cake—tumbled us into Sandgirt Lake at sunset. . . .

Route unknown even to guides

The all-water route between Sandgirt Lake and Unknown Falls was as new to our guides as to us.

Caching most of our outfit on an island, we ascended the Atikonak and were caught up in a battle with racing current and wind-lashed lakes.

Often we seemed to ride a watery treadmill; no matter how hard we dug at the stream, trees on shore crawled astern in slow motion.

John and Leslie never spoke of a river's current; it was always "tide." "There's less tide behind that island," they'd say, or "We'll have fair tide today." . . .

Several days later, beyond the island-girt midsection of Ossokmanuan Lake, we knew by the map we were drawing close to Unknown Falls, though the exact route was uncertain. But when we detected the first slow eddies of Unknown River slipping blackly out of Ossokmanuan, each of us felt his pulse step up a few beats.

Few eyes have seen Unknown Falls

Unknown Falls were not completely unknown, but even on the latest maps Unknown River's course is only a dotted line.

Prior to 1929, only three parties had fought their way to Unknown Falls. Each group saw one pair of falls and departed, unaware that another existed. . . .

Drifting down Unknown River, we were alert for surprises. Below a heavy rapid the stream swept the flanks of a high hill we had sighted from Ossokmanuan Lake.

We moored our canoes and climbed up a nearly vertical slope through incredibly tangled woods to the barren summit. The country unrolled like a map.

Ghostly wraiths of vapor marking

Unknown Falls lay 10 airline miles away, just beyond a fine-looking lake that had been identified as "Lake E." The falls were twice that far off by the river's roundabout course. . . .

Not far below Lake E, past two more rapids, we came into an expansion at whose foot plumes of vapor hung above tossing breakers. There was the thunder of falling water. We had reached Unknown Falls! . . .

Upper Cataract resembles Victoria Falls

The majestic Upper Unknown Falls suggested to us a lesser Victoria Falls; in half a dozen spouts the river tumbled 90 feet over an escarpment into a wild gorge running nearly at right angles to the face of the falls.

An island divided the cataract into two sections. The western fall was the greater. . . .

While good weather still held, we hiked north along the right bank of the canyon, seeking the lower pair of falls. . . .

A half hour later we stood in admiration of the right-bank Lower Falls. Funneled into a single channel, the river fell more than 100 feet, straight and sheer. Spray billowed up from the foot. Swirling mists dimmed the caldron from which the stream, a mass of foam, surged down a sheer-walled canyon. . . .

That night we stumbled into camp long after sunset. Heaping plates of hot chicken and vegetables (from dehydrated stock) revived our strength.

Next morning we canoed across the river to the western shore and bushwhacked to the left-bank side of the Upper Falls, a race of frothing water. Eddying mists alternately obscured and revealed the snowy face of its two 90-foot chutes.

The sun still shone bright, so we hustled downriver, jumping brooks and striding across burned-over lands.

The map showed a tributary flowing into Unknown River from the west, above the left-bank Lower Falls. Anticipating that the stream might be too deep to wade, we had brought an ax and some rope to build a raft. We could not have portaged the canoe five miles across that rough country.

Sure enough, the tributary soon blocked our way. It was a moat between us and the fourth Unknown Falls. . . .

Raft River imposes a barrier

Fortunately, the tributary—which we dubbed Raft River—flowed with slackened current through a pool just before dropping into Unknown River.

John and Leslie cut six or eight dead trees and bound the trim logs together.

"Looks O.K.," said Ralph, but when he and Leslie stepped aboard, the raft sank to the bottom! The men quickly cut and tied another layer of logs.

We poled to the head of the pool. Away from shore even 12-foot poles failed to touch bottom. Leslie, viewing our flimsy vessel askance, volunteered to stay behind. Ralph and Andy were determined to cross. John thought the voyage worth a try.

Leslie cut two paddles. They were heavy, awkward, and narrow, but better than poles that wouldn't reach bottom.

Pushing off into the welter of the in-flowing rapid, we caught the current. At first, the heavy raft scarcely responded to our paddle thrusts.

"Let's go back and start higher up," John shouted, glancing at the approaching crest of the outlet rapid.

"We're all right now," Andy said, as the raft lurched heavily toward shore. We landed halfway down the pool.

It was a short walk to the left-bank Lower Falls. Here again an islet split the flood into two thunderous sluiceways. This chute was more broken up than the others. The creamy spate of water surged with terrifying force through the canyon that received it.

We returned to our jerry-built raft, stepped aboard, and shoved off. Suddenly one of John's legs dropped through the logs right up to his thigh.

"Paddle back!" he called out. "I'm stuck. We'll go over the rapid!"

With a frantic tug, John retrieved his leg, but a moment later Andy's foot slipped through. The raft was loosening up. Grunting with the effort, we leaned to paddles and poles—and presently the eddy caught us. We swung safely in to shore.

Leslie helped us to relax with a cup of hot tea.

Well, we thought, our persistence paid off, despite the chance taken. We were the first, we were quite sure, ever to reach and photograph both pairs of Unknown Falls in summer.

Below its two foaming steps down from the plateau, Unknown River is unnavigable to its junction with Hamilton River below Grand Falls and Bowdoin Canyon.

So we had to retrace our route to Sandgirt Lake.

Stalking a stag caribou

We set backs and shoulders against Unknown River rapids to reach Ossokmanuan Lake again. Threading islands just below the lake, we heard a loud whisper from Andy. "Look there, on the beach! A caribou!"

A magnificent stag with a spreading rack of antlers was browsing on willows at the water's edge. John ordered us to paddle quietly. We might slip close enough for a picture.

We were 100 yards from the caribou when he came stiffly to the alert, nose lifted to sniff the air. He cantered up the beach, toward John and Andy. But out of camera range the animal took alarm, shook his antlers, and plunged into the woods.

The second rapid below Gabbro Lake, scene of tough tracking on the upstream leg, gave us a thrilling run on the way back to Sandgirt. . . .

Wave crests around visible boulders, or below submerged ones, stayed in place. We twisted through, facing each hazard as we met it. Responding to John's steering, "Loon" slipped past one rock on the left, barely grazed two more on the right.

A hard bump over a shoal at the bottom, and the rapid was behind us! "Trout" followed close on our heels. "A good run!" observed Andy. John's face, now relaxed, was wreathed in smiles.

1. Finishing time: Hr.____ Min.____ Sec.____

2. Starting time: Hr.____ Min.____ Sec.____

Subtract line 2 from line 1 to get reading time: *Min.____ Sec.____*

or____ Seconds

Now compute your reading rate according to the following formula:

$$\frac{\textit{no of words}}{\textit{no. of seconds}} \times 60 = ____ W.P.M.$$

Preview Test

Complete the statements below by writing in the missing words.

1. This is an adventure story that took place in _____.
2. The adventurers traveled in _____.
3. This was called a "_____-paddle-stroke journey."
4. The word you supplied in the phrase above indicated to you that it was a _____ trip.
5. The country was unsettled. It was a _____.
6. Much of this country was unknown even to the _____.
7. Sometimes they had difficulty in finding a landing place wide enough to build a _____.
8. The falls called "Unknown Falls" had been seen by only a _____ people.
9. The Upper Cataract which they saw resembled _____.
10. There must have been wild game in the wilderness, for among other thrills they stalked a _____.

Correct your answers by referring to the article itself.

Did you realize that you could get so much information by simply previewing an article and not taking time actually to read it?

Perhaps you have become sufficiently interested in the adventure of these men to want to find out more about their experiences. Try reading the article as fast as you can just for entertainment. Jot down your beginning and ending times and compute your rate as usual.

Check Your Comprehension

Write the letter that appears before the correct answer in the appropriate answer spaces at the right.

1. When people in Burnt Creek saw the men's canoes, they felt (a) confident, (b) hopeful, (c) assured, (d) pessimistic. _____
2. The land in which the adventurers traveled (a) had been

inhabited at one time, (b) was farming country, (c) had been settled by iron miners, (d) was a rarely visited wilderness. ____

3. The upper Hamilton basin encompasses (a) some old iron-ore pits, (b) newly discovered uranium mines, (c) newly explored iron deposit, (d) abandoned silver mines. ____

4. This trip was made in (a) winter, (b) spring, (c) summer, (d) fall. ____

5. When the men were ready to sleep, they (a) crawled into sleeping bags, (b) pitched tents, (c) looked for an abandoned hut, (d) lay down under a thick pine tree. ____

6. On their trip from Sandgirt Lake to Unknown Falls, the men (a) found smooth sailing, (b) had to walk most of the way, (c) encountered racing currents and rapids, (d) were attacked by wild animals. ____

7. Unknown Falls consists of (a) two cataracts, (b) four cataracts, (c) six cataracts, (d) one waterfall. ____

8. These men were the first to (a) build a bridge over Unknown Falls, (b) cross Ashuanipi River, (c) photograph all of the cataracts, (d) visit Unknown Falls on foot. ____

9. When they tried to photograph the caribou it (a) stayed long enough for a picture, (b) charged at them, (c) reared up on its hind legs, (d) plunged into the woods. ____

10. On their way back from Unknown Falls, the men encountered (a) stiff winds, (b) boulders in the rapids, (c) logs in the rapids, (d) heavy fog. ____

Check your answers with the Answer Key on page 48. Allow yourself a score of 10 for each correct answer.

Rate: W.P.M.:____Comprehension Score:____

Vocabulary Study

Here is a list of words taken from the selection you have just read. In the sentences that follow, one word, or sometimes a pair of words, synonymous with a word in the list, is in italics. Write in the blank

space the word that can be substituted without changing the meaning of the sentence.

bushwhack	encompass
chute	portage
muskeg	wraith
tributary	escarpment
lichen	pessimistic

1. The rocks were covered with a *parasitic plant.* _____
2. The men had to *cut away* the bushes. _____
3. It will take 75 rods of fence to *surround* the plot. _____
4. The fog on the lake was like a *specter.* _____
5. An *inclined trough* of water rushed down from above. _____
6. The men climbed to the top of a *steep slope.* _____
7. As the men walked, their feet sank deep in *swamp moss.* _____
8. Unknown River is a *branch* of the Hamilton River. _____
9. Natives took a *gloomy* view of the proposed trip. _____
10. They carried their canoes over the *land between rivers.* _____

See page 48 for answers. Allow 10 points for each correct answer.

Vocabulary Score: _____

Follow-up practice

Continue to practice during definite periods each evening. Try taking a preview of everything you read, both materials that you read informally as a part of your work or recreation and materials that you read during your regular practice periods.

Concisely, here's what you will need to observe and study in making your initial prereading surveys:

1. Title
2. Subheads
3. Visual aids
4. Pattern of writing
5. Length of paragraphs
6. Number of words (to estimate your reading time.) ♦

Part 5 of this course, coming next month, will discuss how to pinpoint the main ideas in your reading.

DID YOU KNOW . . .

Nose to the Grindstone: Good old-fashioned hard work is still one of the most important qualities of the ideal manager, according to a panel of presidents at AMA's General Management Conference. In addition, they agreed, these qualities are necessary: good physical and mental health, reliability, open-mindedness, flexibility, understanding of human behavior, ability to plan, desire to participate, willingness to accept responsibility, and willingness to make personal sacrifices.

Hiring Relatives and Friends: Most American firms apparently have no objection to hiring relatives of employees, although few actively recruit them. An *American Business* magazine survey of 154 companies shows that two thirds hire workers' relatives, including husbands or wives, but one fifth of these won't allow a married couple to work in the same department. Friends of workers are welcome in 128 of the companies, and many consider them a preferred source of personnel.

Another Cup of Coffee? Heavy drinking—of coffee, not liquor—seems to be an important factor in gaining weight. Dr. Leo B. Janis reports in *The Ohio State Medical Journal* that the tension caused by excess consumption of caffeine often leads to nervous "nibbling." The average obese patient consumes about six cups of coffee a day.

The Far-reaching Fringe: Ninety-nine per cent of 250 companies recently checked by *Mill & Factory* magazine offer some fringe benefits. The largest number—24 per cent—estimate that fringe payments cost them from $901 to $1,100 annually for each employee. Thirteen per cent place the cost at more than $1,100. Only 2 per cent estimated benefits at less than $200.

Population Doubles: In the year ending August 1, the population of the United States climbed by more than 3 million. That brought the total to more than 171.5 million people—just about twice as many as there were 50 years ago, according to the Census Bureau.

SM's Roundup of Recent Research Findings

Checking In: Three out of five business and industrial organizations use time clocks to check their workers' hours, according to a Prentice-Hall survey. Every respondent company that employs more than 5,000 men uses mechanical timekeepers, but mainly for factory workers. Only 30 per cent of companies employing only white-collar workers use time clocks, compared with 75 per cent of the manufacturers. About half of those using clocks require that cards be punched for the lunch hour.

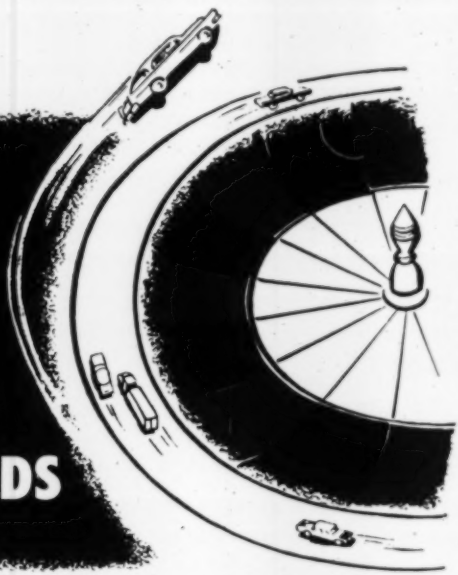
Water Cure: Having some water close by in industrial plants can mean the difference between saving and losing your eyesight. Dr. Hedwig S. Kuhn of the Industrial Medical Association says that washing the eye with water immediately after accidents with chemicals helps to prevent serious aftereffects. The affected eyes should be flooded as soon as possible, whether the chemical involved is alkali, acid, or detergent.

Federal Tax Report: Average federal taxes per capita have multiplied more than 90 times in the last 90 years. Commerce Clearing House reports that the government took $3.82 per person during the period of 1867-76; by the decade 1947-56 the average had risen to $353.98. In 1956, the average federal tax per person was $444.86, compared with only $1.98 in 1885. But the difference isn't as big as it looks, since salaries were much lower and dollars were worth more in those days.

Multiple Vacations: The practice of taking split vacations is growing. One thousand of the 4,000 people interviewed by the University of Michigan's Survey Research Center said they took their vacations at two or more times during the year. The study included only salaried people who received vacations of a week or more with pay.

Inflation Hits the Jailhouse: Anyone jailed in California because he can't pay a fine can work off his obligation at the rate of $5 a day. Before September of this year, the rate was only $2 per day.

HIGHWAY RUET: HOW TO BEAT THE ODDS



By Joel Cohen

Don't press your luck when you step on the gas.

HIS DAY'S WORK finished at the foundry, Bill Brown was glad to be heading home. He stepped on the gas and was speeding around the turn when a car approached from the opposite direction. Only then did he realize he was over the center of the road. He pulled frantically on the steering wheel. His car swerved, spun out of control, and rolled over and over, down the embankment. He never regained consciousness.

Ironic that a man with a perfect safety record in a hazardous job should lose his life on the way from work. Yet that's typical of what's been happening in this country.

The Metropolitan Life Insurance Company estimates that nearly 70 per cent of fatal accidents to workers occur off the job, as do more than half the nonfatal disabling injuries. Off-the-job deaths predominate even in occupations that involve considerable risk; among carpenters and painters, for example, more than four fifths of the deaths

in a recent year were nonoccupational. Iron- and steel-mill workers, Metropolitan found, had three times as many fatal accidents away from work as on the job.

Last year 14,300 workers died as a result of on-the-job accidents. But 40,000 people, of whom 19,400 were workers, lost their lives in automobile accidents. Furthermore, industrial-accident rates are going down, while motor-vehicle accidents are mounting. In fact, motor-vehicle accidents are the leading cause of off-the-job deaths; they cause more fatalities than any other type of accident.

Because the *rate* of death per miles traveled and vehicles registered has tended to decrease in recent years, some people have become complacent about the startling accident statistics. But the issue is still one of human life—of men, women, and children killed or hurt regardless of how many miles they traveled or how many cars were on the road.

Every 13 minutes in 1956 someone died as a result of a motor-vehicle accident, and every 16 seconds someone was maimed or crippled or otherwise hurt by car mishap.

Where have we gone wrong? And what can we do to avoid being killed on the way to work?

One immediate thought, of course, is to keep the car in top operating condition, but this is no guarantee of safe going. Of the automobiles involved in accidents last year, more than 96 out of 100 were apparently in good condition.

Experience is no guarantee of safety, either—more than 98 per cent of accidents are caused by drivers with over a year of experience.

Another expedient might be to take special precautions under poor driving conditions. But, again, this is not enough. The great majority of both fatal and nonfatal motor-vehicle accidents take place in clear weather. As Travelers Insurance Company has described the setting for the typical accident: "It is a straight road on a clear day—conditions perfect, the heavy foot on the accelerator; the eye fixed on the climbing speedometer; the hand on the horn; the mind idling while the car is in high."

Speed—the killer

Excessive speed—the most important single factor in fatal accidents last year—was involved in 21 out of 100 city accidents, and in 38 per cent of rural road fatalities.

In an 18-state survey, three out of ten drivers in fatal accidents last year were found to be violating a speed law. Furthermore, accident figures emphasize the fact that the *safe* speed is often far below the speed limit.

There's a lapse of time between the moment you see danger and the moment you step on the brake. It also takes time for the brakes to

hold. Traveling at 60 miles per hour on a dry concrete road, the average motorist will move forward 317 feet between the time he sees the obstacle and the time he succeeds in stopping the car. Figure out for yourself the chance of avoiding an accident.

Furthermore, speed at impact is a killer. If a car is traveling at 25 miles per hour at the time of the accident, there is one chance in 300 that someone will be killed. But at 35 miles per hour the chance of death is one in 115; at 45 mph one in 70; at 55 mph one in 40; at 65 mph one in 20; and at 75 mph, one in eight.

Pretty grim. But speed is not the only villain.

The driver's condition

"If alcohol could be divorced from driving," Dr. Herman A. Heise of Milwaukee recently told the American Medical Association, "possibly half of our 40,000 doomed to die each year on the highways could live, and half a million more could be spared from painful and crippling injuries."

Most people don't realize how long alcohol continues to affect the system. A study at the Harvard School of Public Health shows it is eliminated from the blood stream and tissues at the rate of only a third of an ounce per hour, and that attempted remedies such as exercise and black coffee do not affect this rate. In other words, it will take a man nearly nine hours to rid himself of the alcohol from four drinks of 86-proof Scotch he may take at a party. Certainly, the degree of intoxication will vary with the individual's capacity—overestimated by most individuals—but in any case it can't be assumed that because a man does his drinking early, he's in condition to drive by the time he goes home.

There are other factors.

Most states will renew a driving license without requiring an eye examination. This means that the driver ahead of you, though licensed, may be just barely able to see the road. It's something to think about when you're tempted to pass a slow car on a hill.

Also, many drivers suffer from less severe eye defects that nevertheless affect their driving. In a series of 4200 tests by the Greater New York Safety Council, it was found that one driver out of four had such defects. Many had poor depth perception—that is, they could not correctly gauge distance. They were advised to leave more space than is ordinarily considered necessary between their cars and those ahead. Others had "tunnel" vision, that is, they saw well straight ahead but not to the side. They were advised to keep turning their heads slightly from side to side while driving.

Basic to many highway accidents is the driver's attitude toward driving. Four out of five deaths or in-

juries, safety authorities estimate, result from recklessness or carelessness.

Safety is a state of mind

How can we account for people's apparent indifference to their own safety and that of others?

One potent factor is frustration on the job or at home. Anger or unhappiness is probably a major cause of accidents. Teaching the other guy a lesson—the urge to pass the fellow who just passed you—has done more than a little damage.

When a person is angry or frightened or otherwise disturbed, he tends to want to lose himself in something, and perhaps gains a certain satisfaction from passing everything on the road. Unfortunately, at those troubled times when he most feels the need to speed, he is least able to concentrate on his driving.

Greyhound Bus Lines regards emotional control as such an important factor in driving that it deliberately irritates candidates for bus-driving jobs to determine their "boiling point." Greyhound spends $35,000 a year for psychological tests in an effort to screen out candidates who are temperamentally unfit to drive, and John P. Hightower, safety and personnel director for the company, feels that the program has paid off with a steady decrease in accidents.

All right, you may say, you're aware of all these factors. You obey the rules, you don't drive when you've been drinking, and you never get seriously disturbed. What's more, you haven't had a single accident so far, and the near misses you've had were always the other guy's fault.

Well, accidents often *are* the fault of the other driver, but the guilty driver and the innocent one may wind up in adjacent hospital beds.

"Defensive driving"

So what can you do? You can adopt a program of defensive driving—that is, being ever on the alert for what that "crazy guy" in the next car is going to do. You should drive in a manner that leaves some leeway for the other man's mistakes.

Since 90 per cent of all collisions are brought about by human error, you must be prepared to yield the right of way, if necessary; be alert to the possibility that a driver may scoot out of a side road at any time; give the fellow who wants to pass you plenty of room.

It is elementary, also, to look before you leave the curb and to let a driver at the curb get into the line. It's life preserving not to speed up after someone's started to pass you, nor to cut in and out of slow-moving traffic.

Give the man ahead plenty of room. Under average conditions you should allow a car's length between you and the driver in front of you for every 10 miles per hour you're traveling. Also, the defensive driver uses signals himself, but

remains alert for other drivers who operate without signaling.

The driver intent on safety is ready for pedestrians who cross in the middle of a street, or from behind parked cars. He slows down when he approaches a school zone, and he sees every child and bicyclist as a potential source of danger.

Following this policy will go a long way toward helping you stay out of trouble, but there's still much more to a perfect safety record.

For instance, consider some of the mechanics: Are you certain that your windshield wipers work easily, clean quickly? Does your horn work? Does your steering wheel respond instantly? Do you have your brakes adjusted *before* the pedal nearly touches the floor?

And are your lights in good working order? Do they aim correctly and dim as they should? When was the last time you checked your tire treads and sidewalls for bald spots and breaks? Are your tires free from bulges, cracks, uneven wear?

In other words, if you're going to have to dodge the "madman" in the next car, you want to be sure your car can respond to your commands.

Night driving

If you're on the night shift, you should drive with special care. More than half of all traffic deaths happen at night. The dusk hours—4 P.M. to 8 P.M.—take the heaviest toll.

Vision, of course, is crucial in safe night driving. So is will power. It's extremely important to resist the urge to "fix" another driver who won't lower his lights when you approach, by raising yours. Often the motorist who tries this form of retribution finds himself "fixed" too.

For maximum visibility, keep your windows clean. Keep the lights off inside the car because they may affect your vision; and, of course, avoid sunglasses or any kind of tinted glasses at night.

If the oncoming driver flicks his lights on and off, he's probably trying to tell you something, usually for your own good. When it happens, check to see if you have your upper beams on; if your lights are turned on at all; if one light is burned out, or if your lights are adjusted properly.

Speedways and turnpikes

Day or night, turnpike driving requires special care. One of the most difficult adjustments is the transition to the turnpike's high-speed travel. You don't have to travel at the top speed limit, but you should keep within 25 per cent of it. Slow down, of course, for bad weather or road conditions. Don't take your eyes off the road to look at scenery. Never stop on the highway, make a U turn, or back up. If help is needed, take your car entirely off the road, and hang a

white handkerchief from the window as a signal to the police patrolling the road.

Enter the highway safely; look for a safe opening in traffic, then stay in your lane.

In general, it's best to keep to the right, particularly when you want to slow down. If you are going to leave your lane, signal. If you're in the right-hand lane, slow down as you approach exits to restaurants and service stations.

On a long trip, boredom is a partner of danger. You can help fight it in several ways—by splitting the driving assignment regularly, taking a break every 100 miles, stopping every hour to stretch your legs, and, if possible, taking a coffee or tea break every two hours. Changing speed every 15 or 20 minutes helps, as does driving with the window open and shifting your gaze. If you are beginning to fall asleep, however, get off the road at once!

What if you walk?

You can, of course, be the victim of an auto accident without even getting into a car. Nearly half the fatal city accidents last year involved pedestrians.

Obedience to the law, and blind reliance on the fact that, as a pedestrian, you have the right of way, are no assurance of safety. Last year more pedestrians were killed crossing city intersections with the signal than against the signal.

The pedestrian, like the driver, needs to have all his wits about him. The last drink "for the road" can be the dangerous one.

"Defensive" walking, similar to "defensive" driving, is probably the best strategy.

Beat the odds

Society can do much to decrease the toll of auto accidents. In some states, driving safety is being promoted by law-enforcement crackdowns. Connecticut, for example, instituted a program of suspending for 30 days the licenses of first offenders booked for speeding, and even stiffer penalties are given for more frequent offenders. And Connecticut's death rate dropped 16 per cent while the nation-wide traffic toll was rising.

Some manufacturing plants, in addition to regularly dramatizing the importance of safe driving, are also helping in other ways. They offer such safety aids as free car inspection for employees, refresher driving courses, and luminous bumper strips for workers going on vacation.

Driving courses are being given at some—but not enough—high schools throughout the country. Percentagewise, graduates of these courses, have better driving records than people of their age group who have not had special training.

Stricter law enforcement and education by companies and schools

can contribute to an improved highway-safety picture. And gains will be made too through safety devices engineered into today's and tomorrow's new cars. But the driver's own actions and attitudes still, for the most part, determine whether or not he'll get home alive. The best safety device of all is a careful driver. ♦

Pointers on Office Safety

THOUGH ON-THE-JOB ACCIDENTS are most frequently associated with factory operations, they take their toll in offices, too. Following are some tips for reducing the hazards:

1. Individual upright filing cabinets should be secured to prevent overbalancing. Single cabinets should be secured to the floor or to the wall and, where there are two or more, should be bolted together.
2. Desk drawers, file drawers, and desk slides should not be left open. These can cause serious injuries when a person inadvertently strikes or stumbles over one of them.
3. Running or hurrying while opening the doors in hallways leads to accidents, since it is usually impossible to determine whether another person is about to enter.
4. Loose linoleum or carpeting may lead to falls; so may highly waxed floors.
5. Razor blades should never be left loose in desk drawers, nor should broken glass be placed in wastebaskets.
6. Closing disappearing typewriter desks without using the handle provided for that purpose may cause hand injuries.
7. Material precariously stacked on top of lockers, filing cabinets, and other high objects can injure bystanders if it tumbles off.
8. Highly flammable material or liquids stored in lockers or cloakrooms are conducive to fires.
9. Lifting loads improperly or lifting heavy loads causes back injuries.
10. Women should not attempt to move standard typewriters or other heavy office equipment unassisted.

—*Conoco Safety Manual* (Continental Oil Company)

Answer Key to Reading Quizzes

Selection 1, page 37. 1 d, 2 d, 3 c, 4 c, 5 b, 6 c, 7 b, 8 c, 9 d, 10 b

Vocabulary Test, page 39.

1) lichen, 2) bushwhack, 3) encompass, 4) wraith, 5) chute, 6) escarpment, 7) muskeg, 8) tributary, 9) pessimistic, 10) portage.

As the Twig is Bent . . .

THE CHILD, they say, is father of the man. And though it's a long, long journey from bassinet to board room, certain childish characteristics, it seems, endure. Consider, for example, these prototypes of some of today's managers—as they were:

Quiz Kid. This child wonder missed his calling as a TV panelist, but his stock in trade continues to be the quick answer, the new angle, the bright idea. When it's time to iron out the practical details, however, he retires to his isolation booth.

Tantrum Tommy. When he used to hold his breath and turn blue, his parents were afraid he'd choke. Though the same thought sometimes occurs to his subordinates, they know that wishing won't make it so.

The Mascot. Always managed to endear himself to the big-leaguers by his winsome ways and amusing antics. Play on the team? Who ever thought of that?

The Collector. This lad had the biggest collection of boxtops, agates, matchbooks, hat buttons, and cigar boxes in the neighborhood. And you ought to see his files today!

Look! No Hands! Away from the department too much of the time, but confident that things will just run themselves, he's the little man who isn't there—at least not for long.

Wavering Willie. Even as a child, he could never decide whether he wanted a Dixie cup or a chocolate Popsicle until the ice-cream truck had gone.

The Joiner. Former cub scout, space cadet, Texas Ranger, and junior G-man, he still revels in the "togetherness" of the group, however indifferent he may be to its purpose. Member of 23 committees, contributor to none, he'll join *yours* in a minute if you ask him.

Mama's Boy. There'll never be another . . . but they wouldn't give Mom a desk at the office. Fortunately, he has a secretary to guard his door, locate his overshoes, and worry about his diet.

Jealous Heart. Seeing him play alone (with the toys he wouldn't let the other kids touch) his parents marveled at how well he entertained himself. Now, jealous of his prerogatives and refusing to delegate, he keeps himself nicely occupied at his desk long after everyone else has gone home.

• *Drawings by* JOE GUARINO

Digests of the Month

You and the Younger Worker

YOUNG PEOPLE OFTEN want different things from a job than do adults. Human relationships are more important to them. They usually want most of all to like the people they work with and to be liked by them. They will try harder and do better if they feel they are recognized and liked.

Do for youth all the things you do for other new workers, but remember also that they are young and developing in body and mind. Because they are at that in-between stage when they are not quite adult, some general principles of supervision take on special importance in dealing with youth.

You probably carry out a program of orientation for all new employees. But it takes more time and attention to specific details to get your young workers off to a good start. And it's well worth the extra trouble, because of the many useful years ahead.

Remember that they're probably scared and that you can help to relieve the tension. A friendly word can be a lifeline. Once they have some confidence—if they're familiar with their surroundings, know their fellow workers, and understand who's to give them orders—they'll be able to learn faster.

Take time to show them the facilities—washroom, lunchroom, drinking fountains—and tell what to do in case first aid is needed. You'll have to explain how, when, and where they'll be paid, why deductions are made, and why some pay is held back. Company rules should be explained fully. When they see that rules are reasonable and in their own best interests, they're glad to observe them.

Try to put them under the wing of a friendly, experienced worker, who can help them feel at home and find their way around. Other workers can also help by accepting the young ones in their usual give and take—and by not teasing them or playing practical jokes.

Talk to them about the end product or service the establishment produces. They want to be a part of something bigger than themselves.

Training workers in job skills is an-

other big part of your job as supervisor. It's always a good idea to organize jobs in short units for beginners. But for young workers this is essential.

Breaking up their jobs into brief periods eases them into a full workday gradually. Young people aren't used to staying with one thing for eight hours a day. School and home tasks have usually been short ones.

Don't just tell young workers what to do—show them how to do it. Take it step by step. Then let them do it a step at a time.

Talk to them in words they'll understand. Shop terms can be confusing until they're explained. Make it easy for young workers to ask questions, and explain the reasons for doing things your way.

Most beginners worry more about speed than quality; they need to know which of the two you consider of first importance. They may not realize that keeping a steady pace and doing the job right makes a difference to their fellow workers. Young people don't mind your being firm about things that matter, as long as you're fair.

Youths need more guidance in safety measures than older personnel. They are curious—they like to experiment—they take more chances. Give them clear orders about safe areas and practices, and point out that doing things the right way means doing them the safe way. Explain what the guards on the machinery are for and what hazards the machines involve. Help them see the reasons for safety regulations and clean-up rules. Show them how to lift and carry. Young people like to learn new ways of using their increasing strength.

Breaks in routine or changes in operation will help their growing bodies. Studies show that prolonged use of one set of muscles, constant stooping, or heavy lifting sometimes hampers healthy development. If work is strenuous or if it involves a steady strain, arrange for rest periods. Young workers sometimes don't look ahead and consider that they have to last out the working day. Girls, for instance, may not realize that they can stand for longer periods of time if they wear low heels.

If young workers are late often, or just stay away occasionally, try to find out why. Helping them learn to take care of their health and to feel responsible for being on the job is better than scolding them, and they'll probably accept guidance from you that they'd reject from their parents. If you have to bawl out a young worker tell him why—it may help him on his next assignment.

Youths may be misled by an abundance of job openings into thinking they can advance themselves by hopping from one job to another. Explain to them that they'll be given more responsibility or more pay once they have their bearings. High turnover results when young workers think beginning jobs lead to a dead end.

Encourage the ambitious and show them how they can get ahead. Watch for developing abilities. If promotion depends on more education or training, tell the young workers where and how they can get it.

If there are better jobs that they

could be considered for in another department, don't hold them back. Never discourage a new worker by keeping him on a beginner's job just because he does it well, or because it's a nuisance to train him on the next one. Everyone profits when ambitious workers get a chance to use their highest capacities.

• BULLETIN NO. 174
U. S. Department of Labor
Bureau of Labor Standards.

Seven Steps to Readable Writing

NO MANAGER is expected to produce a clear, complete memo or report in five minutes. But with a little time spent in preparation, anyone can turn out a simple, attractive, easy-to-read piece of writing. Here are some tips:

1. Put the main idea into a sentence.

After you've assembled the essential facts, write down the essence or theme of what you are going to say. The sentence doesn't have to be fancy, catchy, or brilliant. It can be as simple as: How this department can turn out more pieces in less time.

2. Organize your thoughts.

You might say, in effect, "This is what I propose we do, why we should do it, what it will cost, and how we can get things rolling." There you have a logical organization of thought.

Say what you think, but leave a door open for future re-examination if that becomes necessary. As a rule, let the facts speak for you: "The evidence indicates . . . ," "Statistics suggest . . . ," "Research shows. . . ." Then say what you want to say.

There are times when it is wise to use *may* or *might, could* or *should*—but don't overwork them.

3. Make it simple.

High-sounding language is no substitute for facts and ideas. The pronouns *I*, *you*, and *we* are in the spoken and written language to be used. All forceful writers have used them, from the authors of the Old Testament to Jefferson, Paine, Lincoln, and Churchill.

The second person, *you*, will help to suggest the two-way exchange.

The manager can also use the techniques of the professional writer to make his work come alive. They include:

a) *A good lead.* An interest-arousing first sentence and first paragraph are absolutely necessary. The best or strongest points should be made first and explained later.

Since the ending will create the last impression you leave in your reader's mind, it too should be clear and forceful.

b) *Quotes.* Talk to the people on the job. An office worker, factory employee, or freight handler will often say something in language more vital and meaningful than anything you can think up.

c) *An anecdote* or concrete illustration makes a point just as well in writing as in a talk. Name names, if desirable. Use people to illustrate situations, problems, or attitudes.

d) *Use simplified statistics,* but don't throw a solid block of figures at your reader. He doesn't like to plow through them any more than you do.

e) *Contrast*—setting the good alongside the bad, the efficient by the inefficient—is as effective in writing as it is in speech.

f) *Be honest.* If you know that there is opposition to your ideas, say so, and give reasons for your position. Don't belittle your opponents, or imply self-interest. Give proper credit to those who support your idea.

g) *Vary the length of your sentences.* Make some short, some longer.

You probably won't use all these techniques in any one memo, but it's a good idea to keep them in your mental storehouse so they can be used when they're appropriate.

4. Make things easy for your reader.

Explain any technical or professional terminology as you go. No one will be insulted. Above all, tell your reader what you want him to do. To have active support, you must be specific about how the reader can help to get things started.

5. Cut and condense.

Go through your manuscript word by word and sentence by sentence. Ask yourself, "Does this contribute directly to the telling of the story?" If not, take it out.

Then read your text aloud. Your ear should help you catch excess words you may have missed.

6. Ask criticism warily.

Submit your memo in draft form to others for criticism—but be cautious. Most people will point out small things, such as misspellings or typographical errors, but they tend to pass over main points of thought. However, submitting a text in almost-final form to a few people you trust can provide you with valuable suggestions.

If you send your memo to someone solely for his information, say so. If you submit it for criticism, be sure to explain its purpose clearly.

It will help if you ask your potential critic specific questions such as, "Have I overlooked an important point?" or "Will you mark any passages that can be cut?"

7. Get eye appeal.

If your memo is typewritten, have at least one-inch margins all around. If typed single space, allow a double space between paragraphs, and make some paragraphs short.

When it's practical, break up your entire text into sections. A paper binder protects a memo and improves its appearance, particularly if it is to be kept for any length of time.

A summary of longer reports on the title page is helpful to your readers. But don't tell it all—make the reader want to go on.

• *Jo Chamberlin*
NATION'S BUSINESS
September, 1957, p. 102:4

THOUGH GOODNESS without knowledge is weak and feeble, yet knowledge without goodness is dangerous; both united form the noblest character and lay the surest foundation of usefulness to mankind.

—JOHN PHILLIPS

Planning for Better Materials Handling

YOU HAVE a materials-handling problem when:

—Workers spend too much time lifting materials by hand.

—Plant aisles are cluttered with materials.

—Work doesn't proceed smoothly along the production line.

—The accident rate is on the increase.

These are the problems. As you work toward solutions, try to:

—Eliminate all unnecessary movement and handling.

—Keep materials in motion. Where possible, they should be processed while they are moving.

—Keep material off the floor.

First study the nature of the materials you are moving. Are they heavy or light, small or large, metal or nonmetal? If possible, group similar items, and combine movements of items going in the same direction.

Next figure out the amounts of materials involved.

Next comes the question of volume of finished products. Both current production rates and probable future output should be considered.

Now, find out where all this material is going. Charts can give you a picture of where materials go, what work is done on them at production stations, what tools and fixtures are involved.

Cardboard cutouts or scale models of the equipment can be placed on a plant-layout drawing to give an idea of the use of space.

One more chart is needed before you go ahead with an analysis. The so-called capacity chart breaks each operation down into producing time (when useful work is being done) and handling time. Information for the chart can come from a work-study analysis.

Now that you have a mass of information—much of it charted—your next step is to interpret it. The charts help point out weak spots. They can tell you where too much time is spent in handling, what kind of handling is involved, and what equipment is used. Now you can make corrections —either by yourself or with advice from industrial consultants, materials-handling associations, or equipment manufacturers.

A department's physical limitations will determine, to a great extent, the layout changes you can make and the kind of equipment you will need.

These are some of the physical features you will have to evaluate:

—Location of walls and columns; width of aisles and doorways.

—The weight floors can safely carry.

—Layout of machines and storage areas.

All have a decided effect on any materials-handling system. For instance, fork trucks would not be a wise choice for a department with a small floor area, or if material has to be moved up and down between floors. Nor would conveyors be practical unless you move materials frequently over a long distance.

Roughly, materials-handling equipment can be divided into three categories:

1. Propelled by manpower and rolling on wheels.

2. Powered equipment, such as fork trucks, carriers, tractors.

3. Conveyors, including bucket elevators, pneumatic systems, and other types of continuous lifts and carriers.

Equipment propelled by manpower handles relatively light loads within a limited area. When you select this type of equipment, consider floor conditions, type and size of wheel, and weight of the empty unit.

The selection of powered trucks and tractors depends on how much horizontal transportation or lifting is required. Other factors are frequency of movement, distance, working space, and weight of load.

Handling materials by conveyors is probably the oldest and most commonly used method. Conveyors have great flexibility and few limitations, and can perform several functions. For example, work can be done on an item while the conveyor moves it, and conveyors can load and unload some types of machinery. Other functions include weighing, counting, accumulating, and sorting.

The correct conveyor for any particular situation depends principally on the size, shape, and weight of the item covered.

Here are some rules to guide your selection:

—Gravity is the most economical motive force.

—Equipment built for motion should be kept in motion; idle equipment is expensive.

—Continuous movement of material is more economical than intermittent movement.

—Handling cost is generally proportionate to the size of the load.

A good materials-handling system should:

1. Reduce indirect labor costs.

2. Increase production and at the same time reduce volume of work in process.

3. Enable operators to work at a higher and more consistent level of productivity because of less fatigue.

4. Reduce time and labor at the sending and receiving points, and allow for better inventory control.

5. Provide greater industrial safety, leading to better morale.

• MANAGEMENT DIGEST
Vol. 12, no. 8, p. 65:7

How to Pick a "Second Man"

FEW MANAGERIAL DECISIONS are more important than selecting and training a subordinate to take charge in the supervisor's absence.

If the foreman is absent and his replacement inadequate, production may suffer and worker morale may sag. What's more, the "second man" will probably take over the job permanently if the boss is promoted—which means that the choice must be a careful one.

Although as many as 40 characteristics may be considered, experts believe that the second man should have eight minimum qualities of leadership:

Intelligence is obviously an important quality, and there's no doubt that a second man should rate high in

this respect. The workforce likes to report to a man who is smart. However, intelligence alone isn't enough.

The second man must also have *integrity*. While it's difficult to measure this leadership quality, it's important to decide whether or not the assistant has courage, steadfastness, and the desire to do the right thing.

Forcefulness is another excellent asset—provided it doesn't verge on the hard-boiled. When the assistant is in charge he must be able to issue orders effectively.

Fairness, as a quality of leadership, can be determined by watching the potential assistant in his dealings with other people—especially equals or subordinates.

Loyalty to company, boss, and other workers is another essential trait. Unless this quality is present the assistant may think of his own interests before considering those of the department.

Kindness—its presence or lack—can be observed before an assistant is confirmed in his new job. A supervisor should be strictly impartial, but should temper his judicial fair-dealing with a friendly attitude.

Knowledge of work is usually taken for granted, providing the second man has been employed in the division for several years.

Health cannot be overrated, especially if the second man must be depended on for long hours of effort in periods of emergency.

* *Alfred M. Cooper*
THE IRON AGE
September 5, 1957, p. 76

Hints for Industrial Housekeeping

A NEAT AND ORDERLY PLANT is one of the most effective safeguards against accidents. *National Safety News* recommends these check points for efficient plantkeeping:

1. Maintain an adequate janitor force.
2. Post a printed list of reasonable rules.
3. Provide practical clean-up equipment.
4. Supply enough well-constructed trash containers, and set up a schedule for emptying them regularly.
5. Mark aisle lines and maintain them intact.
6. Provide storage facilities for inactive stock and stock in process.
7. Get rid of obsolete stock and waste material.
8. Keep floors, ramps, and stairs in good repair.
9. Provide adequate lighting. Clean windows, skylights, and lighting fixtures regularly.
10. Set up a system for storing and using hand tools.
11. Provide splash guards, drip pans, and oil absorbents where needed.
12. Allow workers enough time to keep workplaces in order.

Is This Meeting Necessary?

HOW MANY CONFERENCES have you come away from wondering what, if anything, was really accomplished? Or, if you've called a meeting recently, what do you suppose others thought of *your* meeting? How effective was it? What problems were solved? What decisions were made?

Meetings are now an important part of supervisory procedure; but an unnecessary meeting is a waste of time and money, for the group is an expensive tool.

The only way to cut down this waste is to think your problems through so thoroughly that you know a meeting will be productive before you call it.

Here are some of the questions that should occur to you:

What is my *real* purpose in calling this meeting? Should I think this one through a little more myself? What facts should I have that I don't have now? Can I expect to accomplish anything in the time a meeting takes? Will a meeting be best, or could I get the same results working with each person individually?

It's easy to get into a "let's-have-a-meeting" habit, just as it's easy to substitute talk for thought. But sound basic thinking must take place before the meeting can be called.

Always think the problem through thoroughly before you submit it to the group. First, get all the pertinent facts; then define the problem; list all its *possible* causes; creatively think of all *possible* solutions; and arrive at an individual decision. Then use the group to test the soundness of your decision and supplement your thinking.

Most meetings are held to get agreement on facts and a definition of the problem, or to find causes of or solutions to a problem, or to evaluate a recommendation.

Effective meetings need more than just adequate preparation; thoughtful leadership is just as important. A good leader should always:

1. Keep the meeting moving toward its purpose.

2. Encourage participation. People aren't useful just sitting there. At the same time, watch out for the monopolizer.

3. Be firm but tactful in getting rid of distractions.

4. Make occasional summaries of the group's ideas.

5. If something is going wrong, try to find out the reason as quickly as possible. Is it lack of information? Is it because you have strayed away from the immediate problem? Maybe you are seeking causes and solutions when you haven't yet agreed on the problem. If necessary, tell the group what you think has happened, take a break, and try again later.

6. Conclude with a statement of results. List possible causes or solutions. Perhaps you can make future assignments to members of the group. Talk about a date for the next meeting. Have any decisions been reached or recommendations made? In general, evaluate your accomplishments.

These can be your benefits:

—You'll use a meeting only when you are sure it will work for you.

—Everyone who attends one of your meetings will know why he is there and what it is you hope to accomplish.

—Your meetings will take less time and should end with definite results.

—You'll develop your own capacity to think a problem through before using the expensive collective time of a group.

* *Dick Peterson.*
SALES MEETINGS.
July 5, 1957, p. 18:3.

A Guide to Visual Aids

WHETHER YOU'RE MAKING A speech or leading a training session, there is only one good reason for using an audio-visual technique—to help tell your story more convincingly, in a shorter time, and with greater impact. The only function of a visual aid is to help you communicate more effectively.

It is important to become familiar with all the available techniques before you decide which will be best for your purposes. Here is a brief rundown of the major audio-visual techniques arranged, roughly, in order of complexity and of cost, but not necessarily in order of impact or effectiveness.

First, the lowly *blackboard.* Although it is common, simple, and inexpensive, the blackboard, or its modern successor, the chalkboard, is an effective tool. Used skillfully, it can hold the attention of your audience through the use of simple illustrations or an outline of your main points.

A slightly more complex writing instrument is the *large pad of paper on an easel,* which often demonstrates how effective even the crudest attempts at drawing can be. And just putting down a key word or two will help keep the audience thinking with you.

Professional easels with lights, spring clamps, and pencil trays are available, but a simple chart is easy to improvise. Sheets of newsprint are available from most paper houses, and art-supply stores sell pads. You can use soft pencils, grease pencils, chalks and pastels, felt-tipped brushes, or even your kid's crayons.

Next is the *prepared chart,* which ranges from a desk-top presentation suitable for talking to a group of two or three, to 8′ x 12′ charts for large audiences. They can be mounted on an easel to be flipped over the top as they are used, handled individually on rigid sheets of illustration board, or split down the middle and bound like the successive leaves of an oversized book.

All prepared charts share certain characteristics. Because they generally involve an artist-designer, the cost is higher. And they must be prepared in advance, so you can't improvise as you go along.

Charts also have the serious disadvantage of weight, as anybody who has tried to carry a dozen sheets of 30″ x 40″ illustration board will know. And they must be large if

there is more than a handful of people in the audience.

One way to resolve the conflict between size and portability is to use ordinary window-shade material for an extra-large chart. Any window-shade house can sew together strips of cloth to make as large a piece as you want.

All you need for the presentation is a wall and some advance preparation. The bottom edge of the shade should have a hem large enough to hold a stiffening rod. Wind the shade from the bottom around the rod and tie the roll together with a slipknot. Attach it to the wall. When you want to expose your chart, merely undo the slipknot and let it unroll.

Another possibility is *flannelboard*. One background—a piece of flannel stretched on a frame—is used for all the charts, and the elements are sandpaper-backed pieces of paper. The speaker builds up his charts with these elements as he talks.

The advent of color film has brought still another method. Each chart can be photographed on 35mm film to make the familiar 2″ x 2″ *slide*, mounted in either cardboard or glass.

Mark these factors up in favor of the 35mm slide:

Flexibility—With separate slides, it is simple to rearrange the order, replace outdated charts, and select from a library of slides for a special presentation.

Economy—The cost of putting flat charts on slides is not high. It is generally a simple copy job for any photographic studio.

Portability—A large number of charts can be carried in a handy package.

Simple duplication—Duplicate slides can be made quickly and inexpensively.

But there are some drawbacks. Slides have a tendency to get out of order, and they are often projected upside down or reversed. Then too, the necessity for darkness means that the illuminated screen, the most brilliant spot in the room, gets the attention and few people have an eye on the speaker.

Some of these objections can be overcome by using the *filmstrip*, in which the pictorial material is fixed in order on a strip of 35mm film. Filmstrips are even less expensive to duplicate in quantity than sets of slides.

The *overhead transparency projector* is quickly gaining enthusiastic support. The basic model goes in front of the audience, alongside the speaker, and by means of a mirror projects a large transparency onto the screen.

Here are some of its advantages and disadvantages:

Brilliance—Most models are bright enough to be used without darkening the room. The group can make notes easily, and the speaker can see the faces of the audience.

Large transparency—The standard model uses a 10″ x 10″ transparency, although other sizes are available. The speaker can read the type directly from the original, without turning to look at the screen.

Animation—The overhead transparency projector lends itself to the introduction of simple movement. A pencil can be used to point out ele-

ments, and anything written with a grease pencil on the slide will show up on the screen. Other tricks, like building up a series of transparencies, or revealing one section at a time, can also be easily handled.

Duplicates—If all slides are black and white, duplicates are simple and inexpensive. But as soon as color is introduced, the cost goes up rapidly. Certain kinds of color, however, can be produced inexpensively with a special duplicator.

Portability—The projector is heavy because of the large light-box, and therefore difficult to carry.

The next step in audio-visual techniques is the use of *motion-picture projectors.* They cover a whole range of costs, most of them several times more expensive than other visual aids. But again, much depends on the size of the audience and the importance of your message. A high production cost may lead to a low cost per impression.

The visual aid, whether it is as simple as a blackboard or as complex as a wide-screen color motion picture, can be measured in effectiveness only by its success in reaching its goal. An analysis of your problem in the light of the techniques available will help you build a successful presentation.

• INDUSTRIAL MARKETING. *August, 1957, p. 54:4.*

Information—Please

GIVING OR RECEIVING information, an essential part of the manager's job, requires some special courtesies. Here's a check list, compiled by Ernest W. Fair for *The Financial Post:*

Use self-addressed, stamped envelopes whenever you request information or data. This is most important when you ask for free material.

Respect the value of the other fellow's time. Don't ask him to do something without charge that takes up a great deal of time and effort.

Keep your queries strictly to business.

Reply promptly or act promptly on the requests of others. Grant the promptness to others you expect yourself.

Be as clear and definite as you can when answering requests for information.

When you cannot grant a request immediately say so frankly, so that other arrangements can be made.

Take the time to be friendly. Gruff, sharp attitudes may be okay for army recruits, but not in business and industry.

Avoid pulling the "emergency" lever unless you really mean it. Don't say you need information "immediately" unless it's absolutely necessary for you to have it right away.

Let the other fellow know who you are. Have you ever wanted to make personal contact with someone immediately after receiving a letter from him with an illegible signature? If your signature is unreadable, type your

name underneath it. And when phoning, give your name and position before you make your request.

When you make a promise, keep it.

When you borrow, pay back immediately. This includes everything from office machines to technical books. Chances are the other fellow or firm needs them just as much as you do.

Make it easy for the other fellow to supply information. Ask questions as simply and clearly as possible. When writing for information, you can sometimes suggest using an enclosed form or space within your letter for the reply.

• MANAGEMENT
October 25, 1957, p. 2:2

Fables for Foremen

THESE SEVEN "characters" should have passed off the plant-management scene long ago. But there are far too many people like them still clouding up plant operations today. So, if you see yourself here, your course is fairly obvious: Make a change for the better.

Uncertain Merton is sure (well, almost sure) he sees the goal out there in the misty future. He knows, "without doubt, we need action on this problem." Without blowing the fog away, he delegates the necessary work to reach that objective. It will be unfortunate for his hard-working subordinates if the objective looks different after they plunge through the fog.

Moral: First define the objectives your subordinate is to reach.

Superior Sidney is concerned that his subordinate is not qualified to carry out activities he could delegate. He unfortunately sees only what the man can't do—rather than what he *can* do. Blinded by his appraisals, he delegates only routine jobs—snatches them back when the going gets rough.

Moral: Recognize potential among your employees.

Lion-Hearted Lester is perfectly willing to go in there himself and subdue the lion—but he thinks his subordinate should have the experience. Only trouble is that Lester withholds the necessary authority. His poor subordinate gets neither whip nor gun—not even the protection of a chair.

Moral: Match authority to the job that's delegated.

Forgetful Ferdinand is willing to delegate and knows how to review his subordinate's progress. That is, if the poor fellow ever gets started. Why so much trouble? The boss has withheld key information on the problem. Later he'll be contrite and apologetic, but that won't do the job of reviving his subordinate's verve.

Moral: Be sure to provide all the needed information.

No-Sale Norton is forceful and positive. He's the type of boss who probably fights for his men. He's so aggressive and certain, however, that his subordinates do their delegated

jobs only as and when specified. After a while they don't even try to think of better ways. Meantime, Norton is wondering why he always has to plan and order every detail himself.

Moral: Listen a little to your subordinates' ideas.

Sail-In Selwyn is loved by lazy or confused assistants. If they just ask how to buck the tide with a broken paddle, Selwyn will personally make up the lost time by turning on the outboard motor. He's truly wonderful at getting the job done for them. Of course, Selwyn's energetic assistants find learning pretty hard.

Moral: You can't train a person by doing the job yourself.

Check-Up Charlie wants to help his subordinates avoid mistakes. So, he checks on how they're doing—perhaps only nine times a day. Of course, while he's chatting he makes a few pointed suggestions. That way he gets just the kind of job done he wanted.

Moral: If you want your men to have initiative, give them a chance to make mistakes.

• *Fred Meyer*
FACTORY MANAGEMENT AND MAINTENANCE
October, 1957, p. 98:2

Do You Know What You Own?

THERE ARE TWO important reasons for keeping an inventory of personal property. In the first place, if your belongings are lost or damaged, the insurance company will need an itemized list of everything affected, including its value. An inventory will help to guarantee that every insured article is paid for by the insurance company, not by you.

And remember that property values change. Worn-out clothing and furniture are continually replaced by newer, costlier property. All these changes affect the amount of insurance you should carry. An inventory will show whether you're sufficiently covered according to the current value of your belongings.

In making an inventory, go over your house room by room, listing each item, the year of purchase, the original cost, and the present value. Include furniture, fixtures, appliances, drapes, carpets, silver, linens, personal articles, clothes, pictures, kitchenware, china, glassware, books, and hobby equipment. And don't forget the attic, basement, and garage.

When the inventory is finished, be sure to store it in a safe place. Keep it in your safe-deposit box or vault, and revise it every year or so.

—Weekday

LIBERTY is the only thing you cannot have unless you are willing to give it to others.

—WILLIAM ALLEN WHITE

Supervisory Management

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